

285

L/MIL/17/14/76

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ROUTES  
IN  
SINKIANG

GENERAL STAFF, INDIA.



205-21-2

Case No. 19506.

Catalogue No. C.-105.

1926.

SIMLA  
GOVERNMENT OF INDIA PRESS  
1926



10R:L/MIL/17/14/76



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The following publication is obsolete and  
should be destroyed :—

“ Routes in Hsin Chiang dated 1913.





# SINKIANG ROUTE BOOK.

## GENERAL INDEX.

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## NOTE ON GENERAL INDEX.

1. The letter "I" is not used for indexing purposes to avoid confusion with the letter "J."

2. Most of the known routes in Sinkiang have been included in this book whether details are available or not. The index is sufficient to explain their collation. They are numbered as far as possible in order from South to North and West to East; routes which have been reported on in other directions being marked "Inverse."

3. Officers using this book are requested to send corrections, additions, and suggestions for improving it



to the Senior General Staff Officer, M. O.3, Army Headquarters, Simla, and more especially to—

- (a) Give details of routes not fully reported on.
- (b) Correct "Inverse" routes in their correct sense, except where stated to be contrary, *e.g.*, Route I. G. (i) "to be kept Inverse."

4. Reports of different travellers vary greatly regarding the same routes. There are good reasons for this:—

- (i) Distances may differ by miles, owing to flood, at different seasons and in different years at the same season. Rivers and streams, too, change their beds.
- (ii) In the mountains, tracks vary from year to year and month to month; and besides it is difficult to estimate distances correctly when, *e.g.*, you go over cliffs, climb 1,000' up and down and come to a river  $\frac{1}{2}$  mile further on!
- (iii) The difficulty of transliterating names.

See Appendix C.

(ii)



# MAIN THROUGH ROUTES.

Number of Route.	From	To	PAGE.
I	(N) Murkushi ..	Urumchi .. ..	1
I Sec. 1	Murkushi .. .. <i>Note.</i> —For Direct Main Through Route from Kashgar to Aksu, generally travel by Route XIII and Route XIV, Section 2, except in March and from June to September ( <i>vide</i> Epitome of Route I, Sec. 2).	Kashgar .. ..	1
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V Sec. 2	Bulunkul .. ..	Rankul .. ..	47
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IX	(W) Uch Turfan (Bash Agma), near Aksu, <i>via</i> the Bedal Pass. (Inverse).	Shiwkina (Semirechia) ..	57
X	(W) Kuldja (Inverse) ..	Djarkent (Semirechia) ..	58

*Note.*—For letter (N) and (W) references see page (ii).



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XIVSec. 3	Aksu .. .. .	Toksun, <i>via</i> Kuchar and Karashar.	116
	<i>Note.</i> —For Direct Main Through Route from Toksun to Hami, travel by Route XVI.		
XIVSec. 4	Toksun .. .. .	Urumchi, <i>via</i> Ta-pa-cheng	128
XIVSec. 5	Urumchi .. .. .	Kucheng, <i>via</i> Fu-ak'ang Hsien.	131
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(E) *cf.* Routes in Tibet.

(W) *cf.* Routes in Russian Central Asia. Part III, 1923.

(N) *cf.* Routes in Chitral, Gilgit and Kohistan.

(S) *cf.* Routes in Western Himalaya and Kashmir—Vol. I, 1922. *Punch*, Kashmir and Ladakh.

*Note.*—

# ROUTES BETWEEN TIBET AND SINKIANG—

(a) With the exception of Route 15, Sec. 2, from Baba Hatim Pass to Polu, there is no information about any of these routes, of which the important appear to be :—

(b) Baba Hatim Pass to Cherchen (*via* Kara Sai, *see* Route XII (1)).

(c) Bostun in (b) to Ulugh Mustagh Pass.

(d) Cherchen to Bulak Bashi (near Achik Lake).

(e) Charklik to Kum Kul (on Achik Kum Lake).

(f) Donglik to Temerlik.

(g) Tunhuang to Temerlik *via* Khanambai [Route XII (7)].

(h) Tunhuang to Makkai.



# MAIN THROUGH ROUTES.

*Alternative routes mentioned in above.*

Index No. of Route.	ROUTE.		PAGE.
	From	To	
I (1)	Murkushi, <i>vid</i> the Kilik Pass. ..	Mintaka Aksai ..	<i>Vide</i> Route 1, sec. 1 after stage 2.
I (2)	Kilik Pass, through the Wakhjr Jilga.	Kukturnk Jilga ..	After Route I (1).
I (3)	<i>Nil</i> .. ..	.. ..	..
I (4)	<i>Nil</i> .. ..	.. ..	..
I (5)	Darshat, <i>vid</i> the Tang-jitar Gorge.	Chihil Gumbaz ..	After Route I, sec. 1 stage 2.
Note.	Shilva .. ..	Atbashi .. ..	After Route I, sec. 2, stage 4.
I (6)	Yai Dobe (Jadowa)	Bilanti (Belowti) Pass.	After Route I, sec. 2, stage 4.
Note.	Karager Kull ..	Akcha (in Taushkan valley).	<i>Vide</i> Route I, sec. 2, stage 7.
Note.	Shinne-Dawan <i>vid</i> Sarigh Bell pass.	Kelpin .. ..	<i>Vide</i> Route I, sec. 2, stage 9.
I (7)	Chong Kara Jol, <i>vid</i> Kelpin Bazar.	Aksu .. ..	After Route I, sec. 2.
I (8)	Kelpin Bazar ..	Utch Turfan ..	After Route I (7).
I (9)	Karajalpak ..	Chalkoide Mazar ..	After Route I (8), stage 2.
I (10)	Utch Turfan <i>vid</i> Abad.	* Bai (Route XIV sec. 3, stage 6.)	After Route I (8).
I (11)	Aksu old city <i>vid</i> Yetim Dobe.	Kizil Bulak ..	After Route I (10).
I (12)	Khallik ..	Muzart Pass ..	After Route I, Sec. 3, stage 6.
I (13)	Yangi Tagarman ..	Kan .. ..	After Route I, sec. 3. after stage 14.
IV (1)	Tashkurghan <i>vid</i> Berdish Pass.	Pamir Post ..	After Route IV.

This can also be considered as either a minor through route or a lateral route—it is, however, indexed here for convenience, after this publication was prepared for print.



Index No. of Route.	ROUTE.		PAGE.
	From	To	
V (1)	Tashmalik ..	Gez Karaul ..	After Route V, stage 3.
V (2)	Tashmalik <i>via</i> Oi-Tagh and Arpa Dwan.	Gez Karaul ..	After Route V (1).
V (3)	Kashgar <i>via</i> Tashmalik.	Bulunkul ..	After Route V sec. 1.
V (4)	Tashmalik ..	Gez Karaul ..	After route V (3).
VI (1)	Kashgar <i>via</i> the Sunguk Pass.	Andijan ..	Before Route VII.
VII (1)	Artush ..	Turuk Art Dawan ..	After Route VII.
XII (1)	Nia, <i>via</i> Surghak ..	Cherchen ..	After Route XII.
XII (2)	Salkauji ..	Cherchen ..	After Route XII (1).
XII (3)	Cherchen ..	Vash Shahri Bazar	After Route XII (2).
XII (4)	Lashkar Satma ..	Charghalik ..	After Route XII (3).
XII (5)	Chigelik ..	Abdal ..	After Route XII (4).
XII (6)	Charghalik, <i>via</i> Taltma-Kol.	Abdal ..	After Route XII (5).
XII (7)	Mian ..	Donglik ..	After Route XII, sec. 4, stage 31.
XII (8)	Donglik ..	Tung Huang Hsien	After Route XII (6).
XIV (1)	(S)Leh, <i>via</i> the Diger-La.	Karchar (Nubra Valley.)	After Route XIV sec. 1, stage 3.
XIV (2)	Akaz Aghzi, <i>via</i> Yanghalik Jilga	Sangu ..	After Route XIV, sec. 1, stage 19.
XIV (3)	Yarkand, <i>via</i> the right (East) bank of the Yarkand river.	Maral Bashi ..	After Route XIV, sec. 2, stage 7.
XIV (3) (i)	Yarkand <i>via</i> East of Tizaf R.	Merket ..	<i>Vide</i> Note after Route XIV (3)
XIV (4)	Merket, <i>via</i> the left (West) bank of the Yarkand river.	Asak Maral ..	After Route XIV (3).
XIV (5)	Yaka Kuduk ..	Chilan ..	After Route XIV, sec. 2, stage 13.

Note.—For letter (S) reference see page ii.



## V

Index No. of Route.	ROUTE.				PAGE.
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XIV (6)	Bugur Bazar	..	Kara Dawan	..	After Route XIV, sec. 3, stage 8.
XIV (7)	Tim	..	Chorchuk	..	After Route XIV sec. 3, stage 21.

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## MINOR THROUGH ROUTES.

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2	(N)Hunza, <i>via</i> the Shishal Pass (Inverse).	Shahidulla ..	149
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4 (2)	(W) Muk ..	Kara Art (Pass) S. S. W. of Muk.	After Route 4, sec. 2, stage 5.
5	(W) Kashgar, <i>via</i> the Tokh Terek Pass.	Rangkul ..	168
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*Note.*—For letter (N), (S), and (W) references see p. ii.  
(viii)



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Note.—For letter (S) reference see page ii.

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I. K.	Faizabad .. ..	Khan Arlik (Do Sha- mba).	245

\* To be kept inverse.



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2. A.	Chiragh Saldi ..	Yangi Pass ..	<i>Vide</i> Route 2 stage 4, Note.
2. B.	Surukwat <i>via</i> Kahkte Kuram Pass.	Tiznaf River ..	<i>Vide</i> Route 2 stage 6, Note.
4. A.	Moji .. ..	Opal Bazar ..	No details.
4. B.	Muk <i>via</i> Opal ..	Kashgar .. ..	After Route 4 (2).
4. C.	Muk <i>via</i> Kara Bel Pass.	Kashgar .. ..	After Route 4 B.



Index No. of Route.	ROUTE.		Page.
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MAIN THROUGH ROUTES.

M226CGS

(xiv)



## ROUTES IN SINKIANG

### MAIN THROUGH ROUTES.

#### Route No. I.

FROM MURKUSHI (HUNZA DISTRICT) (*vide* ROUTE 11 AND 11-K OF "ROUTES IN CHITRAL, GILGIT AND KOHISTAN, 1920\*") TO URUMCHI.

In 4 Sections as under :—

	Miles.	Stages.
1. From Murkushi to Kashgar ..	311	15
2. From Kashgar to Aksu ..	316½	14
3. From Aksu to Kuldja ..	247½	16
4. Kuldja to Kweitung and to Urumchi .. .. .	?	15?
Total ..	?	60

#### Section No. I.

FROM MURKUSHI TO KASHGAR *viâ* KURGHAN AND YANGI HISSAR.

*311 miles.*

*15 stages.*

*Authority.*—Captain A. R. B. Shuttleworth, 1909;  
Lieut.-Colonel P. T. Etherton, 1921  
Lieut.-Colonel Broke-Smith, 1922.

*Epitome.*—This route is practicable for ponies in summer: From Mintaka Aksai to Tash-Kurghan, and from Chong-Karaul to Iggiz-Yar, the road could be made practicable for

\*See also "Routes in Russian Central Asia," Part iii, 1923, Route VII.



ROUTE NO. I.—SECTION NO. I.—*contd.*

wheeled transport without much difficulty. Wheels can be used from Iggiz-Yar to Kashgar. This is the easiest route into Kashgaria from British territory.

Murkushi is 7 marches from Baltit and lies at the junction of 2 streams which flow from the Mintaka and Killik passes, respectively.

There are passes between Murkushi and the Chinese Pamirs :

1. Mintaka—which is practicable for some months when the others are closed by snow.

2. Killik.—The easiest when there is little or no snow, but more difficult than Mintaka at other times and a day's journey longer.

3. Gul Khwaja Uwin.—Very difficult.

Other obstacles are the ford at Tash-Kurgan, said to be very dangerous at times, and numerous other fords which are also difficult at times and probably impracticable when rivers are in spate, 3 passes which are not very difficult in summer and autumn, and the Tar Bashi defile, which can be very dangerous.

*Camping grounds.*—Ample ground at each stage.

*Water.*—Plentiful.

*Fuel.*—In small quantities at most stages.

*Fodder.*—Grazing at most stages.

*Supplies.*—At Tash Kurghan and Yangi Hissar ; elsewhere very scarce, except sheep and cattle which are fairly plentiful throughout.

---

No. of stage  
and total  
distance

Details.

---

1 GUL KHWAJA UWIN. 11m. 4 f. From Murkushi  
(for situation of Mur-  
11m.4 f. k'ushi see *Epitome*  
*above.* The Murkushi Camping ground is grassy and  
sometimes swampy in parts) the path follows nullah N.-E.  
t wards Mintaka pass and rises abruptly over broken and rocky  
ground until small plateau of Boihal is reached at mile 6.



ROUTE NO. I.—SECTION No. I.—*contd.*

Thence to Gul Khwaja Uwin the road presents no difficulty.

*Camping ground.*—is close to small hut S. W. of Mintaka glacier and within 200 yds. of its normal moraine.

*Water.*—Plentiful.

*Fodder.*—Scanty, grazing on the bank of the stream.

*Note.*—There are 3 passes over this range between Murkushi and Mintaka Aksai.

2 MINTAKA AKSAI .. 18 m. The path rises very abruptly and follows the Mintaka glacier.

29 m. 4 f. The ground is very broken and great caution is necessary. After about a mile the path turns suddenly north up an almost precipitous ascent of 800 yds. to the top of the pass. Transport animals must be unloaded and loads taken up by hand at any rate during 7 months when the pass is under snow. The height of the pass is 15,450'. The path traverses top of the pass for  $\frac{1}{2}$  m. and then descends steeply to the valley of the Mintaka stream. This valley is 400 to 500 yds. wide. The hills on both sides are bare except for some patches of grazing. The path follows the stream for  $12\frac{1}{2}$  m. The encampment consists of 6 Kirghiz *Akois* or tents and lies near the junction of the Mintaka and Karachukar streams. It lies in a broad, open and slightly undulating valley covered with excellent grazing. The owner of the encampment has about 600 sheep, 60 yaks and 8 ponies.

*Camping ground.*—Ample.

*Supplies.*—Nil.

*Water.*—Good and plentiful.

## ROUTE No. I (1) (Alternative).

## FROM MURKUSHI TO MINTAKA AKSAI.

Alternative route *via* Killik pass (practicable for yaks and loaded ponies when there is not much snow.)

No. of stage  
and total  
distance.

Details.

1 SHIRIN MAIDAN .. 8 m.—From Murkhushi the track crosses to left bank of Killik stream.

8 m.

B 2



ROUTE NO. I.—SECTION No. I.—*contd.*

At 2 m. there is a long and rough rock slip to be crossed, otherwise easy gentle ascent.

*Camping ground.*—Grassy, room for a brigade.

*Supplies.*—Nil.

*Fodder, grazing and fuel.*—Burtsa and dung.

2 KUKTURUK .. ? m. At 3 m. Killik, a stone hut and sheep fold; room to camp a battalion but on bad stony ground. Then a steep but short stony ascent, and then a gentle rise to the Killik pass, 15,600'. Then gentle descent almost level for a mile.

3 MINTAKA AKSAI .. 18 m. Down left bank of Karachukur stream an open grassy valley passing Tigar Mansu where there is sometimes an encampment at 12 m. (There are several gravel banks to cross, otherwise no difficulty for wheeled transport. These could be cut or fords improved across the stream).

## ROUTE No. I (2).

## FROM KUKTURUK INTO THE WAKHJIR JILGA.

There is another track on from Kukturuk which crosses into the Wakhjir Jilga, which it follows down to its junction with the Kukturuk Jilga.

*Camping ground.*—at the junction (13,950'). Sarikolis camp here during summer and autumn.

*Supplies.*—Sheep, cattle.

*Water.*—Plentiful.

*Fodder, grazing and fuel.*—Burtsa and dung.

*At Mintaka Aksai join Mintaka main route.*

ROUTE NO. I.—SECTION No. I.—*contd.*

3 PAIK .. 15 m. The path crosses the Mintaka stream near its junction with the Kara Chukar river and then runs N.-E. along right bank of latter.



ROUTE NO. I.—SECTION No. 1.—*contd.*

The Tagh Dumbash Pamir between Mintaka Aksai and Paik is a wide treeless valley covered with short grass which affords excellent grazing. The valley is undulating and a road could easily be made for wheeled transport.

Paik is a Sarikel encampment of several *akais*, a rubble hut and a Chinese picket who live in a walled enclosure.

*Water.*—Good.

*Fodder.*—Good grazing.

*Supplies.*—Sheep and cattle.

*Fuel.*—Burtsa and dung.

4 DAFDAR .. .. 20 m. The path still follows the right bank of river. The ground becomes rougher. The valley is broad and open and the hills to the N. and S. more rugged and bare than near Paik. At Ujad Bai (see route I. A.st. 3) 9' in the Khunjerab stream joins the Tashkurghan river. At 11½ m. the valley narrows for a mile and opens out again near Dafdard which is a strip of cultivation with about 40 scattered houses stretching for 4 m. along the right bank of the river from its junction with the Zanken stream downwards and about 400 yds. wide. This is the first cultivation met with and it is only in favourable seasons (as 1922) that the barley ripens.

Height 11,530'. There is sometimes a Sarikoli encampment on the left bank. Wheeled transport would experience no difficulty on this stage except where the valley narrows. This could be improved sufficiently in 4 to 6 hours by ½ company sappers with tools and explosives.

*Water.*—Good.

*Supplies.*—Sheep and cattle, some barley in a good year.

*Fodder.*—Good grazing.

5 JURGAT GUMBAZ. 13 m. The path follows right bank of the river nearly due N. mostly over gravel desert. The valley is wide and open. There is a good deal of cultivation at the mouth of the side nullahs on the opposite bank, down which a path available only in winter runs to Tashkurghan.

*Water.*—Plentiful.



ROUTE NO. I.—SECTION No. I.—*contd.*

*Supplies.*—Nil.

*Fodder, grazing and fuel.*—Scanty (scrub, dung).

6 TASHKURGHAN .. 25 m. The valley is flatter from this point onwards.

102m. 4f.

About 5½m. to S. of Tashkurghan there is good grazing and sometimes a Sarikoli encampment, and one patch of cultivation. The path leads mostly over pebbly river bed. Cross to left bank opposite Tashkurghan.

The river is here split up into numerous channels and is said to be unfordable at times, the water being lowest in the afternoon. Tashkurghan is a small village of mud houses and is the head quarters of the Chinese district of Sarikol, with an Amban and garrison of 60 to 70 men (August 1922), who seemed to be under the command of the military Amban at Yarkand. The street runs N. and S. and forms the bazaar. Above and to the west of the bazaar is a plateau or ridge on which are the Chinese Government's and the British Aksikal's quarters and the Russian post (empty, August 1922).

*Water.*—Good.

*Fuel.*—Not plentiful.

*Fodder.*—Grazing excellent.

*Supplies.*—Obtainable but limited.

7 DARSHART.— 20 m. Path runs due N. along the left bank of river through fertile

122m. 4f.

country and good grazing land.

At mile 3 is the hamlet of Tiznaf-Kurghan; at 5½ miles the small village of Chashman.

At 9 m. the Kok-Bulak-Jilgah or Kara-Su stream has to be crossed; no obstacle. The path then turns E. while the path through Gez to Kashgar [part of Route 4 continued by Route V] runs N.

The Tashkurghan river here turns suddenly E. after entering the Baldir gorge, 3 m. N. E. of Chashman. The path is no longer practicable for wheeled transport until Chong-Karaul (in stage 12) is reached.

After crossing the Karasu river the path follows the left bank of Tashkurghan river for 1 m. due E. then turns N. up a narrow nullah at the head of which is a broad open gravel



# ROUTE NO. I.—SECTION NO. 1.—*contd.*

desert (Kok-Bulak-Dusht). This is crossed in a N.-E. direction and the Darshart valley reached at. m. 20. The sides of the valley are steep and the bottom rough and stony. There is sometimes a Sarikoli encampment here or a mile up the valley, but for anything except a very small party camps must be pitched on the desert.

*Water.*—Good (from Darshart stream).

*Fuel.*—Scanty burtsa and dung.

*Fodder.*—No grazing in the vicinity, but some camel browsing.

*Supplies.*—Sheep and cattle from Sarikoli camps.

8 YAM-BULAK .. 25 m. [*Note. There are two alternative Routes.*

147m. 4 f.

*The shorter via Tarbashi and the Tangitar Gorge, see Route No. I (5), is now scarcely used except in winter and spring.*

*In the summer months when the water is high in the Tangitar Gorge, the regular route between Darshart and Chahil Gumbaz is as follows :—*

*(Authority C. P. Skrine, July, 1922.)]*

The ordinary path ascends the Darshart valley, rough going for 9 m. to the Kok Moinak Pass. At m. 2½ the valley narrows to a defile which is usually partially blocked by ice early in the season.

The ascent to the pass is steep. After crossing it (1½ m. wide), the path descends to the Chichiklik Ma'dan, a crater shaped plain, the head of the Shindi valley (down which a winter road leads to Tashkurghan).

On this plain are the last Sarikoli encampments met with, beyond this are Kirghiz.

A *Camping ground* (Komitek) can be found at m. 12 in a fold of the hill on N. edge of the plain. 1 m. W.-N.-W. of the larger lake and 2 m. due W. of CHICHIKLIK GUMBAZ.

*Water.*—Good and plentiful from springs.

*Fodder.*—Grazing, excellent.

*Supplies.*—Sheep and Yaks plentiful, chickens and eggs to be had from the Kirghiz in small quantities.

The path leads N. by E. across the plain, joining at m. 13 the direct track between Kok Moinak and Yambulak



ROUTE NO. I.—SECTION No. 1.—*contd.*

whence it runs up a side nullah to the summit of the Yangi or Yam-Bulak pass (16,100') 2 m. away, easy going, except for last few 100' where steep and stony. On July 11th, 1922, the flat top of the pass was completely covered with snow, but track was beaten firm and presented no difficulties. The descent on the N. side is steep for 500 ft., then easy. At m. 16 a lake called Yashil Koll, 1 m. long by  $\frac{1}{3}$  m. broad is passed on the left; this lake is said to carry ice all the year round. For  $1\frac{1}{2}$  m. below the lake, path is very rough and valley slopes steeply, swerving round to E. and then to S.E. A small tarn is then crossed to L. B. after which the track improves. At m. 19 the mouth of the Merki Glen is passed; there is supposed to be a track over the "Merki Dawan" to the Karatash valley. (Route I. F. ?), but the writer who followed it up to a height of 17,500 feet found the so-called "Dawan" to be a ridge over 18,000 ft. high with snow cornice, quite impracticable for baggage animals even in summer.

Path enters broad open, grass-covered valley and turns E. by S. There is room for camps anywhere in the valley.

Yambulak is a Kirghiz village of 7 or 8 Akois on level meadows on both sides of the stream.

*Water.*—Good.

*Fuel.*—Burtsa and dung.

*Fodder.*—Good grazing.

*Supplies.*—Sheep, goats and yaks plentiful, milk, chickens and eggs in small quantities.

9 CHAHIL GUMBAZ.—25 m. Continue down the valley. The track which is narrow but well marked, keeps to the L. B. of stream. At m. 2 a steep path on S. side of the valley, practicable for ponies, leads up over the Togaboini pass to Tarbashi at the hot spring and shrine of Kuchkar Ata (m.  $3\frac{1}{2}$ ). The valley narrows (at m. 4 a Kirghiz encampment in August 1922) and the sides become more and more precipitous until the Tangitar gorge is joined at m. 7. Shortly before the junction, the river is forded, a matter of some difficulty when the water is at its highest, but regularly done. Direction S. E. Path crosses to right bank at m. 11 and the stream joins the Tarbashi river, 4 m. above its bend to the S.



ROUTE NO. I.—SECTION No. 1.—*contd.*

The path crosses the stream several times (probably impracticable when the water is high) and follows down to its junction with a stream from the N. The path then turns up N. and follows the river bank for  $1\frac{1}{2}$  m. Then N.-W. up a gorge which leads to the foot of the Torat pass, 13,340 ft. The ascent is very steep and rocky in parts. The summit is a "knife edge." Descent is not so steep. Both sides are covered with grass. The path runs down a small nullah at Chahil Gumbaz, which is a Kirghiz encampment with 2 rubble huts.

*Water*.—Good.

*Fuel*.—Scrub and dung.

*Fodder.*—Good grazing

*Supplies.*—Sheep.

ROUTE No. I (5) (Alternative).

FROM DARSHART TO CHAHIL GUMBAZ WHEN  
TANGITAR GORGE IS PASSABLE.

I      TARBASHI      ..    22 m. Leave stage 8 (above)  
at 8 m. From the  
22 m. Chichiklik pass cross  
the Shindi valley E. by N. to the head of the Tarbashi stream  
to Tarbashi, where there is a Kirghiz encampment. The valley is  
600 yds. across. The hills are steep but covered with good  
grazing.

*Water*.—Good and plentiful.

*Fodder.*—Grazing good.

2 CHAHIL GUMBAZ 21 m. Path follows the Tar-  
bashi stream. At 2  
43 m. m. the valley narrows  
and the Tangitar gorge is entered. The sides of the gorge are  
precipitous, it is strewn with boulders and the water runs  
at a great pace; it is a serious obstacle at any time but impass-  
able when the water is high. At 7 m. join the Yambulak route.

### MAIN ROUTE—*contd.*

ROUTE NO. I.—SECTION No. 1.—*contd.*

10 KASHKA SU .. 8½m. The path runs  
181 m. N. from Chahil Gum-  
of Chaarlun river for 2½ m. then turns N.-W. up a *nullah*.

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ROUTE NO. I—SEC. No. 1.—*contd.*

After  $\frac{1}{2}$  m. it turns due N. again and ascends the Kashka Su Pass. A very steep ascent of less than 1,000 ft. up a zig-zag path with bad courses. This could very easily be vastly improved, with little labour. It is now a serious obstacle for loaded animals. The summit of the pass is rounded and covered with grass. The northern slope is gentle and terraced. At the bottom of the slope there is a steep drop into a *nullah* which leads in 1 m. to the Kinkol valley.

*Camping Ground.*—At the junction where there is a mud tomb.

*Water.*—Good.

*Fuel.*—Burtsa.

*Fodder.*—Grazing good.

*Supplies.*—Nil (except sheep from neighbouring Kirghiz Camps.

11 AKTALA .. 32 m. The path runs N.-W.  
for 18 m. down  
213m. the Kinkol valley

crossing and recrossing the stream which forms no obstacle. The valley is about 300 yds. wide. The sides are not steep and the slopes are covered with excellent grazing. At 4 m. Ak-Tuge Mazar a small Kirghiz settlement at the mouth of a side *nullah* on left bank of the Kinkol. At Tuquoibashi 18 m. the valley and path turn N. There are 3 rubble huts here but no Kirghiz in August.  $11\frac{1}{2}$  m. N. of this, valley widens very considerably and the hills on each side become much lower. A few trees appear at Aktala. A stream which rises below the Kizmak pass joins river.

Aktala is a small Kirghiz settlement of 2 rubble huts with a few patches of barley alongside the river. This is the first cultivation seen (1922) in the Kinkol valley all above being abandoned. Cultivation in the valley is decreasing and in the cases of the plains increasing and spreading rapidly.

*Water.*—Good.

*Fodder.*—Grazing good.

*Supplies.*—Sheep.

12 IGGIZ YAR .. 22 m. The path crosses the  
stream from its right  
225m. to left bank. The  
river is a serious obstacle when in spate (only 18" deep in the



ROUTE NO. I—SEC. No. 1.—*contd.*

middle of August) and when the snow water is coming down. At 4 m. N.-W. of Aktala the Gkiyak stream has to be crossed which is also sometimes a serious obstacle. The valley widens and becomes more bare. The path which is good, except when in the river bed, keeps to the left bank of the Kinkol. At Chong Karaul which consists of 2 villages, 1 m. apart, the valley is left and the path enters the plains of Kashgaria.

At northern end of these two villages a strong rubble wall stretches down the left bank of the valley to the water. The path passes through the wall and fortified *serai*.

Thence it runs N. over a loess plain and a long dry river bed to the oasis of Iggiz Yar. It could be made practicable for wheels from Chong Karaul northwards.

Iggiz Yar is a fair-sized village in a fertile oasis.

*Water*.—Good from river, but irrigation water undrinkable.

*Fodder*.—Bhoosa and a little grazing.

*Supplies*.—Limited.

*Note*. Route I. G.

From Iggiz Yar a track leads to Kizil Bazar (Route XII Pt. I Stage 3.)

13 YANGI HISSAR .. 25 m. The path runs due N. from Iggiz Yar over a saline plain 7 m. to

260 m. Suget, an insignificant village. Leaving Suget, the path crosses a plain and a small stream at Karawas, a small village. The path joins the main route from Yarkand to Kashgar  $\frac{1}{2}$  m. N. of this village. The country is richly fertile from Karawas to Yangi Hissar. Just S. of Yangi Hissar is a loess ridge over which the road runs.

There is a large Mussulman cemetery on its N. slope. Yangi Hissar is a large town of 50,000 inhabitants. It is the headquarters of a district under a Chou Kuan. There is a Chinese fort N.-E. of the town with a supposed garrison of 1 battalion Chinese infantry, 1 squadron Chinese cavalry and 6 guns, but in reality there are only 160 infantry and 50 cavalry. Half of the latter are not mounted.

*Water*.—Bad. The water in town should on no account be drunk. Good water can be obtained from a stream  $1\frac{1}{2}$  m. N.-E. of the town.



ROUTE NO. I—SEC. No. 1.—*contd.**Supplies.*—Plentiful.

14	YAPCHAN	..	23 m. 4 f. (See Route No. XII Sec. 1.)
283 m. 4 f.			
15	KASHGAR	..	27 m. 4 f. (See route No. XII Sec. 1.)
311 m.			

## Section No. 2.

FROM KASHGAR TO AKSU *viâ* THE GHULJA PASS.

276 miles 4 f.

15 stages.

*Authority.*—Colonel Kornilov, 1903 ; Major Geoghegan, 1907 ; Lieut. Whitaker, 1908 ; N. Fitzmaurice, 1921 ; C. P. Skrine, 1924.

*NOTE.*—The main route from Kashgar to Aksu is by Maralbashi, see route XIII and XIV, Sec. 2, but it is advisable to use this, the upper road *viâ* Yai Dobe and Uch Turfan, in March when the lower road is muddy and in June—September, when gadflies, mosquitoes, and other insects make marching in the Maralbashi jungle impossible by day.

*Epitome.*—Wheeled transport could be taken along the whole of this route, the only obstacle being the Ghulja Bash Pass and 3 or 4 rocky ridges which have to be crossed at the season of high water in the Taushkan Valley (roughly May 15th—Octr. 15th). At these points the assistance of the local Kirghiz (which can be obtained by arrangements with the Begs) would be required.

*Camping Grounds.*—Are good throughout.

*Water.*—Plentiful except at stages 4 and 7.

*Fodder.*—Lucerne and bhoosa can be obtained in fair quantities except from stages 3 to 7 inclusive ;

*Grizing.*—Is poor at stage 3, 4 and 6, good at stages 5 and 7.

*Supplies.*—Plentiful except between stages 3 and 7 inclusive.



ROUTE NO. I—SEC. No. 2.—*contd.*No. of stage  
and total  
distance.

Details.

- 
- 1 KŪM BAGH (BESH KARIM). 15 m. Except for  
the stony bed of the  
15 m. Artush river between  
miles 9 and 10, the road lies through well cultivated country.  
Kum Bagh is the last village of the Besh Karim Oasis.
- 2 KALTA YAILAQ .. 32 m. The road traverses  
flat clay desert in  
47 m. an E.-N.-E. direc-  
tion. At m. 10 a well-preserved Buddhist *stupa* makes a good  
landmark on the left. There is a wayside inn and a shrine at  
Kūm Singer, m. 11½. At m. 25 a small river called the Terek  
Su is crossed by a wooden bridge, and the Kalta Yailaq oasis is  
entered at Tugh, where there is a shop and inn. From this  
point, if it is not desired to visit the bazaar of Kalta Yailaq,  
a direct road can be taken to Kuduk on the northern edge  
of the oasis, 7½ m. from Tugh, thus shortening next march  
by 1½ m.  
*Water.*—Good.  
*Supplies.*—Plentiful from the bazaar.
- 3 SUGHUN KARAUL 18 m. The road leads north-  
wards over a barren  
65 m. plain to a low range  
of gravel hills, which is crossed at m. 14 by a barely percepti-  
ble saddle. The Sughun valley is entered at Boz Langar a  
mile further on, from which point the track leads up along a  
small stream of sweet water to the Karaul.  
*Camping Ground.*—On plateau on right bank of stream  
below Karaul .  
*Supplies.*—Obtainable in small quantities from the half  
dozen farmsteads of the valley.
- 4 YAI DOBE (JADOWA) (JALTUBE ?) 30 m. The track  
about 10 m. East of leads up a broad *nullah*  
95 m. Chong-Kara-Jol. to an easy pass (5,850  
ft.) whence it debouches on to a level plain some 40 m.  
long by 7 to 15 broad, bounded on the N. by the Tian Shan.



ROUTE NO. I--SEC. No. 2.—*contd.*

The middle part of this plain is sparsely covered with desert poplars, some of which attain a considerable size. Yai Dobe, which consists of a shrine and 2 houses belonging to Kirghiz, is a mile from the northern shore of a salt lake. There are springs of slightly brackish but drinkable water at Kai Bulak (m. 11) Dong Jigda (m. 19) Toghrak Bulak (m. 23) and Kupruk Bulak (m. 27). The mosquitoes and gad-flies in summer are notorious.

The plain of Yai Dobe is the winter grazing ground of the Kirghiz of the mountains, as follows:—

Kururo, 200 families, winter headquarters Yai Dobe;  
Shiulva, 140 families.

Patmalik, 200 families, winter headquarters Karayoll, 2 m.  
N. of Kai Bulak (m. 11).

*Note.*—There is a Chinese frontier karaul at Shilva, whence a pass, possible for loaded animals, leads over to Atbashi in Semirechia (3 days).

## ROUTE 1 (6).

## FROM YAI DOBE (JADOWA) (JALTUBE?) TO BELOWTI PASS (ALTERNATIVE ROUTE).

*Note.*—From here the two roads separate. The northern one is as follows, but is said to be dangerous on account of quicksands and is never used by traders now.

1 UI BULAK .. 27 m. Road good but stony.  
27 m. Cross a low spur into the Ui Bulak valley.

*Water.*—Scarce, but plenty of snow.

*Fuel.*—Plentiful.

*Grass.*—Moderate.

2 TOGARAK .. 17 m. Road up stream and over a spur from the main ridge; stony,  
44 m. but not difficult. Togarak is a large grassy plain surrounded by hills. It is sometimes used by Kirghiz as a winter pasture ground, where snow is used as a substitute for water.

*Water.*—Nil.

3 BELOWTI PASS .. 9 m. Road crosses some low spurs and passes up a ravine, a steady  
53 m.



ROUTE NO. 1—SEC. No. 2.—*contd.*

ascent of 4 m. followed by a sharp pull of 2. m. to the pass (11,350'). Both ascent and decent are perfectly easy. The road descends on the north side of the pass to the valley of the Kokshal river.

MAIN ROUTE—*contd.*

5 PICHAN .. 25 m. The road continues  
5,600 among desert pop-  
120 m. lars in a north-east-  
erly direction skirting the salt lake until Zambil encampment is reached (8 m.) Here there is a spring of good water. Shortly after this the forest is left and the road crosses an absolutely flat and bare plain, liable to inundation in the spring. Three miles off the main road to the N. at 18 m. are 2 small clumps of trees, one mile apart, called Yairam Bulak. There are Kirghiz here most of the year.

Pichan is the headquarters of about 20 Kirghiz families and consists of 2 oases about  $1\frac{1}{2}$  m. apart. The upper one, Kichik Pichan, is close to a spring of sweet water.

*Fodder.*—Fair, grazing.

*Supplies.*—Very small quantities.

6 KEKLIK. .. 20 m. Road goes N. W.  
over a wide, slightly  
140 m. rising plain, abso-  
lutely bare with the Tegarakh hills on the left. At m. 18 it turns up a dry *nullah* and after crossing a low saddle comes out on to the broad Keklik valley. Here there is a small perennial spring of sweet water, which comes down from the Kirghiz *yailaq* of Jailo (100 families).

*Fuel.*—Brushwood.

*Fodder.*—Limited, grazing.

*Supplies.*—In small quantities from Kirghiz who can usually be found in neighbourhood.

7 KARAGOR KULL .. 17 m. The road leads up  
the Karagor *nullah*  
157 m. which bears N. N. W.  
for 6 m. then turns N. to m. 8, Kizil Eshma. Here one or two Kirghiz families are usually encamped. There is a very small trickle of sweet water, which the Kirghiz may try to conceal,  $\frac{1}{2}$  m. up the *nullah* to the north. From this point the trend



MAIN ROUTE NO. I—SEC. NO. 2.—*contd.*

of the valley is N. W. At m. 11 the lowest camping ground of the Karagor Kirghiz is reached.

*Note.*—At m. 16 a track leads northwards over an easy pass to Akcha in the Taushkan Valley. The only water at Karagor Kull is from a shallow rain-water pond, the dimensions of which in September 1923 were  $50 \times 50$  yds. and the average depth 1 ft. A larger supply is however available from a small lake called Suluk Kull, 1 m. to the south over an easy pass. This lake measured  $300 \times 100$  yds. and had an average depth of  $1\frac{1}{2}$  ft. 20 Kirghiz families live in the country round Karagor; they belong to the district of Kelpin, 2 marches away to the south.

*Fuel.*—Dung.

*Fodder.*—Good, grazing.

## 8 SONTASH

.. 18 m.  $\frac{1}{2}$  m. from the pond

the track crosses the

175 m.

easy Arpa Chuchak

pass (11,000ft.) and descends into the valley of the same name, which is entirely waterless. At m. 5 the track turns up the narrow Sarigh Jilga and passes at m.  $6\frac{1}{2}$  the encampment of a wealthy Tungan sheep-owner. At m.  $7\frac{1}{2}$  it strikes due N. up the Ghulja Bash nullah. 2 or 3 Kirghiz families are usually encamped on the hillside to the right; there is a good spring of sweet water. At m. 9 the Ghulja Bash Pass (10,000 ft.) is crossed; the descent for  $\frac{1}{4}$  m. on the north side is steeper than that on the south, but there is no serious obstacle. At m. 10 there is a good spring among pine-woods. The Jilak Su glen enters the N. Ghulja Bash valley at m. 13; this contains extensive pine-woods and a good spring. The Taushkan river (called the Kok-shal further up in Russian territory) which here runs E. N. E. is reached at m. 17, 1 m. above the upper end of the Sontash cultivation.

*Water.*—Unlimited from Taushkan river.

*Fuel and Supplies.*—Available in fair quantities from country people.

## 9 KOKAN-ISHAK.

.. 29 m. The Sontash culti-

vation extends for 10

204 m.

m. down the right

bank of the Taushkan. At m.  $2\frac{1}{2}$  the rocky ridge of Kok Moinalak is crossed, the road striking the river again at m. 7. At m. 9 it skirts a rocky promontory, off which in September 1923



MAIN ROUTE NO. I—SEC. NO. 2.—*contd.*

the water was 6-8 ft. deep. At m. 10 the summer track leads up a *nullah* and crosses a series of low rocky ridges known as the Shinne-dawan, and regains the flat again at m. 12.

Note.—*From the bend of the river at m. 13 a track, possible for loaded ponies, leads over the Sarigh Bel pass to Kelpin (2 marches).* From the upper end of Safar Bai cultivation (m. 16) to m. 22 the track leads through cultivation. Between this point and Kokanishak there are two or three small rock-ridges which have to be crossed in summer, when the Taushkan River is unfordable.

*Supplies.*—Plentiful from Safar Bai.

10 UTCH TURFAN .. 18 m. With the exception of ridges of rock (about 100' and steep on the E. side, which is crossed by a well constructed pathway 4' wide) at m. 6, the track leads through flat cultivated country. The rich lands of Utch Turfan are entered at m. 12.

Utch Turfan is an agricultural centre of some importance, and is also the jumping-off place for the trade with Semirechia *viâ* the Bedal Pass (see route IX). In September 1923 the Chinese garrison consisted of 200 infantry and the same number of cavalry.

There are about 4,200 houses and huts and some 21,000 inhabitants.

11 ACH TAGH .. 16 m. Good cart road through well-populated country. At m. 10 pass the small village of Ya Koprik. Ach Tagh, a fair sized village with a weekly bazaar, is reached at m. 16.

12 BARIN .. .. 17 m. 4 f. Very good road though there are many unsound bridges across irrigation channels. At m. 13 ford the Aksai river; this may give some trouble at high-water season, and guides should be taken. The road is generally lined with trees, and passes several small villages and farms. Barin is a fair sized village with a bazaar weekly on Wednesdays.

13 AKSU OLD CITY .. 21 m. Good road, apart from unsound bridges. At Barin the road enters



MAIN ROUTE NO. I—SEC. No. 2.—*contd.*

a stretch of desert which continues to m. 3. At m. 6 pass the small village of Aral, and at m. 10 ford the Arik river. This is a very large river in summer and there may be difficulty in crossing; in any case guides should be taken. The road then runs through rice fields and at m. 21 the Mussalman city of Aksu is entered by the W. gate.

## ROUTE NO. 1 (7).

FROM CHONG KARA JOL TO AKSU *via* KELPIN  
BAZAR (ALTERNATIVE).

180 miles.

8 stages.

*Authority.*—Map of Sir Aurel Stein's explorations in Chinese Turkestan and Kansu.

*Epitome.*—No specific details.

*Camping ground.*—

*Water.*—

*Fuel.*—

*Fodder.*—

*Supplies.*—

} No details.

No. of stage and total distance.		Details.
1	TUNGUZLUK (5,000')	.. Route apparently goes E. through a sandy track with scrub, past Dong
..	Jigda, Ochak Bulak, Kapul Bulak, Yai Dobe and thence S. E.	
2	CHOLAK (5,220')	.. Westerly through desert.
..		
3	SAIGAN .. (4,250')	.. Cholak Dawan, 5,710', Tatir, sand and scrub to Saigan.
..		



MAIN ROUTE NO. I—SEC. NO. 2.—*contd.*

- 4 KELPIN BAZAR .. N. W. between hills, Kum  
 (3,730') Yari. Cultivation  
 Sayat, Shahr ruins,  
 Baghlik.
- 5 ACHAL .. .. From here one route [I (10)]  
 (3,380') goes N. in 3 stages to  
 Utch Turfan, and the  
 other N. W. to Aksu. This the latter continues over a stream  
 to Achal.
- 6 KURUK UZUM .. Send and scrub, Kol Mahal-  
 (4,260') la, Ongan-Mazar.
- 7 OROCHE .. .. Toghrak Bulak, Ak-Yar,  
 (3,600') cross Tuskan-Darya.
- 8 AKSU .. .. Through cultivation, past  
 Makid Kare-dobe,  
 cross Kum-ank-Darya  
 branches, Topkan to Aksu.

## ROUTE NO. I (8).

## FROM KELPIN BAZAR TO UTCH TURFAN.

80 miles ?

4 stages ?

*Authority.*—Map of Sir Aurel Stein's explorations in  
 Chinese Turkestan and Kansu.

*Epitome.*

No. of stage and total distance.	Details.
1 TEREK-ABAD .. (5,660').	Route apparently goes N. across grave- sai, past Sairam- mazar, Tonguz-borun, Sairam-Kanchigal.
2 KARA-JALPAK .. .. (7,630')	Koruni-boguz River, Sarik-bulak, Chigilik, Chettike, Ak-tash
Shaiq-kak.	



MAIN ROUTE NO. I.—SECTION NO. 2.—*contd.*

## ROUTE NO. 1 (9).

FROM KARA-JALPAK a route goes N. W.  
14 m. to CHALKOIDE MAZAR. No details.

ROUTE NO. I (8)—*contd.*

3 ILACHA .. .. The Main route goes  
—— (7,370)'. N. over Saghi-  
Kanart, 8,600 ft.

through narrow gorge to Ilacha.

4 UTCH TURFAN ... .. N. W. Bash-Kara-  
—— Shilwa, Kosk-Dobe-  
Ziarat, Achchih-otan,

Kongtai-Karaul, N. past Sotke-Mazar, and through cultivation  
to Uch Turfan.

## ROUTE NO. 1 (10) (ALTERNATIVE).

FROM UTCH TURFAN TO BAI *viâ* OI TATTIR AND  
ABAD.

164 miles.

7 stages.

*Authority.*—C. P. Skrine, 1924.

*Epitome.*—This is a convenient alternative route, following cross-tracks and avoiding Aksu, from stage 10 of route I Sec. 2 to stage 6 on Route XIV Sec. 3. It crosses Route I Sec. 3 st. 3 at Abad. The track could be used by wheeled traffic throughout, a little preparation being required at the Topa Dawan between stages 4 and 5. The 3rd, 4th and 5th marches are through desert, but water is plentiful at halting-places as well as in the Tarang Su half way between stage 3 and 4.

*Supplies.*—Plentiful except on the three middle marches.

1 YANGI ABAD .. 18 m. Good road N. W.  
—— through cultivated  
18 m. meadow country to  
the Taushkan River; which is reached at m. 13. At the end of  
September 1923 the crossing (3 channels) was easy for loaded  
ponies. Road continues over gravel desert passing 2 m. to the  
S. of Kuche oasis.

*Water.*—By a channel from the river.

*Fedder.*—Fair, grazing.



MAIN ROUTE NO. I.—SECTION No. 2.—*contd.*

*Supplies.*—Can be arranged through the Beg of Yangiabad.

2 OI TATTIR ... 21 m. Track traverses an open and smooth plain until m. 15, 39 m. when the first canal of the Kun Arik valley cultivation is reached. From here to the river at Oi Tattir the track winds among closely cultivated fields and farmsteads.

*Camping ground.*—On the ravine flats on the near side of the ford.

*Supplies.*—Unlimited from the villages of the exceedingly fertile Kumarik valley.

3 ILEKLIK .. .. 30 m. Cross the bed of the Kun Arik river which is 3 m. broad at this point. At the end of September 1923 the water ran in 12 channels, none of which presented any difficulty to pack animals. Oi Tattir is the highest point at which the Kun Arik river can be forded in the summer months. The road continues over meadows and through the cultivation of Taghak village to m. 7, when it emerges to the vast expanse of *sai* (sloping gravelly desert at the foot of mountains) which extends for 50 m. to the E. At m. 10 the shrine of Sheikh Tulumush, which is situated in a small oasis on a spring of sweet water is passed (altitude 4,400'). Four families of Sheikhs reside here and cultivate 40 acres of fields and gardens. After a shepherds' shelter (no water), at m. 24 is passed, the *sai* begins to slope downwards and at m. 26 the track turns down the *nullah* to the S. E. among gravel hills. This is followed until m. 29 when the Pokkalik stream is reached, here flowing between precipitous cliffs 4×500' high. Turning northwards upstream, the track keeps along the hillside above the right bank crossing several nullahs.

*Camping ground.*—A strip of comparatively level ground, 100 yds. × 40 yds., under the bluffs on the right bank.

*Supplies.*—If small quantities only required, can be obtained by arrangement with the Beg of Pokkalik village, 8 m. upstream; otherwise Aksu old city, 22 m. to the S.



ROUTE NO. I.—SECTION No. 2.—*contd.*

4 ABAD .. 26 m. Track strikes N. E.  
up a dry nullah and  
95 m. comes out at m. 4  
on to a wide expanse of *sai*. From here to Abad it goes due E.  
and is almost flat. The Tarang Su is crossed at m. 16.

For Abad see Route I, section 3, stage 3.

5 ILKACHE .. 18 m. The track ascends  
a series of nullahs  
113 m. between precipitous  
cliffs of red sandstone and crosses a "Topa Dawan" at m. 9,  
4 m. E. of that crossed at m. 10 of stage 4, Route I, Sec. 3. Some  
work would have to be done on this pass before wheeled trans-  
port could go over it, but there is no serious obstacle and no  
rock. Following a stony nullah downwards on the N. E. side  
of low gravel hills the track debouches on to a wide expanse of  
*sai* and curves due E., the first cultivation of the Muzart  
River valley being reached at Ilkache.

*Water*.—Limited, from the storage ponds only.

*Fodder*.—Poor, grazing.

*Supplies*.—In fair quantities from the neighbourhood  
farms.

6 YAKA ARIK .. 20 m. Road good, over  
plain dotted with  
133 m. groups of small farms.  
Largest of these are at m. 5 Ak Gumbaz, m. 8½ Akhunlung.  
Yaka Arik cultivation is entered at m. 15.

For Yaka Arik see Route XIV Sec. 3 st. 4.

7 BAI .. 31 m. *Vide* Route XIV, Sec.  
3 stages 5 and 6.  
164 m.

## ROUTE NO. I (11).

FROM AKSU (OLD CITY) TO KIZIL BULAK *viâ*  
YETIM DOBE.

70 miles.

3 stages.

*Authority*.—C. P. Skrine, February 1924.

*Epitome*.—This is an *alternative route* to stages 1—4 of  
Route No. I Sec. 3. It is easy throughout for loaded animals  
but the Jigda Bulak Pass could not be crossed by wheeled  
vehicles.



MAIN ROUTE NO. I.—SECTION No. 2.—*contd.*

1 ISHALANCHI .. 21 m. For 16 m. the main road to Urumchi is followed. Then 5 m. 21 m. N. E. across *sai* to an isolated oasis on a canal which comes down from the foothills of the Tian Shan.

*Supplies.*—Limited from village on main road.

2 YETIM DOBE .. 29 m. The track crosses the bare *sai* in a N. E. direction 50 m. until the Tarang Su river is reached at m. 6. This is followed up among low hills until m. 12 when the track emerges on another wide expanse of *sai*. The left bank of the Tarang Su is followed until m. 16, when the path suddenly dives into a maze of perpendicular-sided ravines among red clay hills. At m. 20, it comes out on to a steep mountain side and at m. 21 crosses the Jigda Bulak Dawan. In the Jigda Bulak ravine at m. 21½ there is a small spring of sweet water. The dry bed of stream is followed up until m. 25, when the path emerges on to a wide grassy valley below the snows of the Tian Shan. Yetim Dobe is the farm of a wealthy flock-owning family of Aksu. Altitude 6,900'.

*Water and grazing.*—Good and unlimited.

*Supplies.*—In small quantities from the owners of the farm.

3 KIZIL BULAK .. 20 m. The track is well marked crosses a succession of valleys 70 m. of the Tian Shan with easy passes between. Kara Bulak at m. 5 is the largest village. At m. 13 the last ridge is crossed and the path descends gradually over *sai* to Kizil Bulak.

## ROUTE NO. I.—SECTION No. 3.

FROM AKSU (YANGI SHAHR) TO KULDJA, *via* MUZART PASS.

247½ miles.

16 stages.

*Authority.*—Kostenko, 1872 ; Captain Pemberton, 1892 ; Lieutenant Whitaker, 1908 ; Major Greenhill Gardyne, The Gordon Highlanders,



ROUTE NO. I—SECTION 3.—*contd.*

May 1911; Fitzmaurice, 1921; Brig.-General R. Pigot, 1923 (stages 1—10) and see Routes in Russian Central Asia, 1923, Part III, Route XII.

*Epitome.*—This is the most direct route from Aksu to Kuldja. With the exception of the section over the Muzart Pass itself, it could readily be made fit for wheeled transport. *N. B. The Muzart Pass is a glacier.* Apart from the fact that a glacier is always altering, the route up this glacier is never really easy for pack ponies though nothing is impossible from an engineering point of view. Brig.-Genl. Pigot does not consider the making of a cart road across this pass as a practical military proposition. As far as Jam (Cham) the cart road to Urumchi is followed and the telegraph wire to that place is near the road. Caravans follow the road throughout the year. This is the route generally taken by traders going from Kuldja to Aksu, but when going in the opposite direction the Bedal Pass is generally preferred.

*Aeroplane Landing Grounds.*—Possible at Aksu, Cham, Abad, Shattu (or more correct Shota).

*Tanks.*—Impossible route for the present tank owing to Muzart R. and Muzart Pass.

*Camping ground.*—Ample room at all stages.

*Water.*—Plentiful, throughout the route, with the exception of the first two stages where good water is obtainable only at camps.

*Fuel.*—Obtainable everywhere.

*Fodder.*—Limited S. of the Muzart pass, but ample northwards of it. There is good grazing at every stage except Tam-batash.

*Supplies.*—Nil except at Aksu, Cham and Kuldja.

No. of stage  
and total  
distance.

Details.

1	AKSU .. .. 5 m.	From gate of Yang
	(Mussalman Town).	Shahr the road runs
5 m.		N. through bazar
		and cultivation, thence ascends 75' to loess plateau. Road
		for 300 yds. is in a cleft with only room for two carts. Road



ROUTE NO. I.—SECTION 3.—*contd.*

is bad across plateau for 2 m. where it descends a narrow cut to the plain. Hence N. N.-E., for a m. under the cliff which increases to 100' or 150' in height. It then turns at right angles past *baghs* and enters the town of Aksu.

*Water.*—Very bad, but at Yangi Shahr the water is reported good.

## 2 CHAM (Jam)

.. 20 m. Road runs through narrow bazaars and streets. Thence S. E.

25 m.

for 500 yds. It then ascends a narrow ravine on to plateau, passing the cemetery. At 3 m. the road joins the cart road from Urumchi, along which the Urumchi-Aksu telegraph line runs. Plain undulates slightly and shallow watercourses occur which are used for irrigation. There are very few settlements N. of the road, the bulk of these and cultivation being to the S., some miles away. At m. 9 a hamlet and caravan *serai* are passed. The road runs through an avenue of trees. At m. 19 the shallow depressed bed of the Cham (Jam) river is crossed. The river is glacial and has an small flow. There is a short ascent to the prosperous village of Cham or Jam where there is a bazaar.

*Supplies.*—Plentiful.

## 3 ABAD (Abat)

.. 18 m. The cart road and telegraph continues N. E. across desert.

43 m.

The path to Abad strikes off at the bazar through fields of the oasis. At m. 1 cross salt encrusted watercourse often dry. No grass but tamarisk and scrub in places. At 11 m. across a dry salt watercourse coming from the N. W. At 4 m. the going is harder and the road begins to rise over a stony plain to narrow gap in the red earth of Topa Davan and does not go over any difficult and precipitous hills. At 16 m. the path goes to the left of a salt working, 1 m. W. of the above gap. At 17 m. the path goes over furrowed hills, 500' high, often difficult and precipitous. After descending to the foot of the hill the path ascends by a small *nullah* 400 yds. close to the W. side of the hill, then emerges on a broad terrace overlooking the valley of the Avat river. The road is 150' above the river which runs in numerous small channels. The road drops slightly to the *serai*, which is 60' above the river. The bed of



ROUTE NO. I.—SECTION No. 3.—*contd.*

the river is stony and 200' to 500' across. The river emerges into the plain through a narrow gap. The valley above this is 800 yds. broad. One Farm.

*Fuel.*—Scarce from valley N. of *serai*.

*Fooder.*—Grazing poor.

4 KIZIL BULAK .. 19 m. The road crosses the river by a ford above the *serai*. The ford is

62 m.

difficult in the afternoon but is always fordable in the morning. The channel is constantly changing. At m. 1 the path leaves the valley and ascends a narrow, winding ravine, sometimes only 40 yds. wide. The hills on either side run up to 500'. At m. 3 the ravine opens out and the country is very intricate, full of ravines and rock pinnacles, and animals can only move up the beds of the sandy *nullahs*. The path is heavy. There is brackish water in places. The bed of the stream contracts as it is ascended until a pebble ridge is reached. At m. 9 the final ascent of this ridge is made by a fairly steep path. At m. 11 the path descends down a stony dry *nullah* and emerges on a straight gravel slope extending to the Muzart river plain. This plain is intersected by many dry *nullahs* and there is usually grass on it. The path gradually descends to the plain and at m. 14 joins a path from the S. near a pool of bad water. From here the plain is less cut up, there is more grass and a slight up hill gradient. The path is very good to Kizil Bulak which is a scattered settlement of about 6 farms.

*Water.*—Is brought by tapping the Avat river or some tributary some miles to the W.

*Supplies.*—Obtainable.

5 KHOLUK-BOI .. 6 m. The path runs N. E. and is good until it enters the series of

68 m.

huge terminal moraines of the Muz glacier. These mounds are 300' in height and the path twists among boulders and is very stony. These come to an end at 4 m., close under the precipice forming the western portion of the entrance of the Muz valley. The path crosses at 7,000' and from here the fort of Kurghan, called Kunya Shah, can be seen. (From here Route XIV N. leads to Yakka-arik, 32 m. W. of Bai). Kurghan fort faces N. and is situated between an unfordable river and



ROUTE NO. I.—SECTION No. 3.—*contd.*

an unscaleable precipice. It is now used as a customs house and holds two Chinese and some Turkis, but no soldiers. At m. 5 the path passes through the fort by two gates and continues up the right bank of Muzart river, which is about 50 to 80 yds. wide, a furious glacier stream quite unfordable in a gorge 50 to 100' deep. Kholukboi, where there is good grazing, is situated at the South of Kholuk-Su, a glacier tributary issuing from a narrow glen, and difficult to cross in the afternoon. The village has 6 families, the men of which are all employed on the road or pass. Arrangements are made from here for assistance and guides when crossing the pass.

6 KHALIK .. .. 18 m. Direction from here  
 ——— (Chailik Mabuse). .. W. N. W. The valley  
 86 m. is straight for the  
 first 12 m. It averages  $\frac{3}{4}$  m. broad and rarely exceed 1 m. The mountains are 3,000' in height, increasing to 5,000'. The sides of the valley are precipitous but there are good slopes of grass higher up. There is a little firewood on the N. faces of side glens. There is coarse pasture along the valley. At 3 m. the road is stony, but it is good on the whole. It leads across two conglomerate cliffs, whose feet the river washes, and is well made. At 7 m. Yangi Mahalla is reached. This is the last inhabited place and has 6 families, who are employed on the road and pass. There is a large flat here with a good stream. At 10½ m. is Turak Yailik, a large meadow of good grass below an old moraine which blocks the valley. The river runs in a gorge 350' deep between the hills of debris. The path over the moraine is bad and stony and descends 100' to a terrace over the river where there is a strip of poplar trees and a ruined *serai* of Tograk or Turak. This is on the right bank and is unfordable in summer. There is good grazing here. At m. 13 the river widens and runs on a single bed between lower banks and is not so rapid. At m. 16 crossing a stony face, the remains of a poplar wood is reached, and the grass is only good at certain seasons. In August 1921 the grazing was very poor. There is a habitable *serai* under the perpendicular cliff. At m. 17, the lower 2,000' of the mountains appear inaccessible nearly everywhere. Khailik is below the point where the valley makes its bend to the W.



ROUTE NO. I.—SECTION NO. 3.—*contd.*

## ROUTE NO. I (12).

## FROM KHAILIK TO MUZART PASS (ALTERNATIVE).

At m. 3 a bridge has been constructed by the Chinese across the Muzart river; it was only built in 1921 but is already suffering from the force of the stream. This bridge leads to an alternative road to the Muzart pass, up the left bank of the river, the difficult ford above Khailik thus avoided. This new road is generally followed by pedestrians, donkeys and sheep; but the going is said to be very rough and stony, and travellers with ponies prefer the old road.

MAIN ROUTE.—*contd.*

7	TAMGATASH	.. 18 m.	At m. 1 the valley
104 m.	(Tamba-Tash).	..	bends to the N. and crossing a large stony face, the valley is seen to widen and grow more flat. Here a glacier torrent of black water has to be forded; the current is very fast and this gives trouble in the afternoon. At 3 m. crossing splendid water meadows, the path reaches the point where the mountain walls and the old lake bed coincide. The river has to be forded here. The ford is constantly changing and guides are necessary. In 1921 the ford of the Muzart was easy in July, when the river flowed in many channels, but more difficult in August although the volume of water was probably less. There is a good footing as the bed is of pebbles. From here to m. 7 road ascends the left bank and is very stony. At m. 7 the valley is narrower and blocked by debris over which the path is bad. The river runs through a narrow gorge. At m. 9 the Tugh-bel-che valley opens on the opposite side of the river. The lowest 2 m. of this are covered with grass and wood. At m. 11 the path leaves the bed of the river and climbs steeply over a spur on the left bank. It then crosses a deep ravine with precipitous sides before returning to the level of the river; a good and easy path has been made down the sides of the ravine. At m. 14 the path runs up the shingle bed of the river, but in places has to leave it on account of deep channels. From here the road runs up the river bed crossing 2 streams. The river is near the western wall of the valley. At m. 17 the Karkol valley opens to the W. This is filled with an extensive glacier. At 17½ m. a glacier stream in many channels is crossed by an easy ford. This and the



ROUTE NO. I.—SECTION No. 3.—*comtd.*

Karkol river, from the W., unite with the river from the Muz glacier, to form the Muz river. Camp is now beside the ruined fort of Tamba Tash; the river is forded at Tamba Tash and the crossing is sometimes difficult. There is no grazing, and no fuel.

8 KHAI-YAILAK .. 20 m. 4 f. The present path at first follows the western wall and gradually edges over to the E. side. The going over the glacier is very bad; but the path changes almost from day to day. The last part of the ascent is very steep and steps have been cut in the ice. Above the steps is a house where live the men responsible for the steps. This is about 4 m. from Tamba Tash, and Mr. Fitzmaurice's caravan took 5 hours to reach this spot. The path then hugs the E. wall, running parallel to the glacier till m. 7, the rise being very gradual.

See Routes in Russian Central Asia, Part III, Route XII. At 7 m. the path again commences to cross the glacier to the W. side.

The going across the glacier is bad, but the great difficulty in summer is to cross streams flowing in the ice with steep banks; these streams stop running at night and can only be crossed in the early morning. At m. 11 the W. side has been reached, and the path then leaves the main valley and glacier, and turns up a smaller valley which leads to the summit of the pass known as the Yupolik Pass. The summit is reached at m. 13. In July 1921, there was so much snow still on the pass as to make it difficult for laden ponies to cross. The descent is gradual at first, but becomes steep at m. 15; a small glacier is then passed from which a small stream flows. At m. 17 the path enters a wider valley and crosses the right bank of the stream, which here joins a larger stream. There is some grazing at this point, and fuel not far off. The path then leads down the right bank of the Togra Su. Excellent grazing, fuel and water at Khai Yailak.

9 ADUNGER .. 14 m. Easy road down very rich valley,  $\frac{3}{4}$  m. broad, well-grassed, wooded and watered. There are no permanent inhabitants as the valley is deserted in July but occupied in winter. At 6 m. the valley narrows and the river changes from the thickly wooded western side of the valley to below the bare and rocky eastern



ROUTE NO. I.—SECTION NO. 3.—*contd.*

foothill. The path crosses the river by a unsteady log bridge. There is also a ford. From here the path is narrow with, at the foot of the hill, belts of thick pine wood alternating with rich glades and grassy meadows. Boggy in places. Between m. 7 and 8 the path is in two places carried along the face of the rock supported on poles. The river is crossed at Udungei by a wooden bridge. At m. 13 the valley opens a little and the path runs along a richly wooded, old, moraine, to camp on the tongue between the river and the considerable Khamer Dawan stream. There would be little difficulty in making this stage possible for carts.

10 SHATTU ... 12 m. Known as Shota on  
 (or Shota). S. side of the pass.

150 m. At m. descend through pinewoods and meadows and across the Khamer Dawan stream by a ford. Then follow the left bank. The valley becomes narrower and the hills steeper. At 8 m. the river is confined for a m. in a narrow gorge. The road has been carried 300' above and is well made, with solid rock galleries in two or three bad places. A road has also been made with logs in two places. The road then descends sharply to the river, the hills on the left bank recede and get smaller, and the pinewoods diminish. Between Shota and the foot of the Muzart Pass, northern side, there are three old piquet houses, built by the Russians, and now disused. At 10½ m. the wood ceases and the road crosses the river by a new solid log bridge. The road then runs down the right bank. Two large tributaries join the river from the left bank. At 11½ m. the hills on either side fall back and diminish to bluffs and, under the last spur on the right bank of the river, at 12 m., is the log post of Shattu, constructed by the Russians. This is 75 yds. square, rather ruinous and is now occupied by an observation post of one Chinese Officer and some dozen men. The river being generally unfordable, most of the traffic to the E. and W., as well as to the N. and S., passes Shattu, and the Naryan-Kol fair, 30 m. to the East, produces considerable local traffic.

11 GEELAN .. 24 m. Several Kalmak en-  
 campments are passed.

174m. 4f. At m. 23 there is a lake of slightly brackish water. Geelan is situated on the right bank of the Tekes river.



ROUTE NO. I.—SECTION No. 3—*contd.*

12 KOURA .. .. 24 m. The river has to be  
crossed at Geelan.  
198m. 4f. There is one small  
ferry boat; a pony, attached by the tail to the side of the boat,  
takes the boat across. Ponies have to be unsaddled and swum  
over. The crossing place has to be changed from time to time,  
on account of mud in the bed of the river. Immediately  
after crossing the river, the path leaves the river. A few small  
streams are forded, and at m. 10 some small hills are passed  
on the left. At m. 12 there is a small inn kept by a Kashgari.  
The path crosses a low ridge and enters another grassy plain;  
this is swampy in places, and the mud is heavy and treacherous.  
Towards Koura the country undulates and the grazing is not  
so good. Koura is a considerable village with a large Buddhist  
temple; it is situated at the foot of the hills lying to the N.  
of Tekes valley. The old road from Geelan is said to have been  
rendered impassable by mud left by the floods of the Tekes  
river. The road *via* Koura has been used for many years now.

13 YANGI TAGARMAN 21 m. The road from Koura  
to Tagarman crosses  
219m. 4f. a series of ridges, which  
gradually become higher and steeper as Yangi Tagarman is  
approached. There are often small streams in the depressions.  
The country is covered with coarse grass and weeds. A solitary  
house is passed at m. 5, and Yangi Tagarman, a log hut  
beside a far sized stream, is reached at m. 21. Here there is  
good water, fair grazing and some fuel. The horses were much  
troubled on the road by flies and horse flies.

14 KAN .. .. 24 m. Steep ascents and  
descents continue till  
223m. 4f. Boura is reached at  
m. 4. The road then climbs the Chapchal Pass by a gentle  
ascent.

## ROUTE NO. I (13) (Alternative).

FROM YANGI TAGARMAN TO KAN *via* THE SUWASU  
PASS.

An alternative route to Kan is *via* the Suwasu pass, the road  
to which branches off to the left from the road to Chapchal



ROUTE NO. I.—SECTION. No. 3.—*contd.*

Pass, 1 m. from the summit of the latter. This road is said to be shorter, but more stony than the Chapchal road.

Instead of descending the Chapchal Pass to Kan, many travellers branch off from this road to the right, by a road which leads to Karatam. Here the Ili river flows in one stream, and is easier to cross at high water than elsewhere. There is one large ferry boat which might hold 8 horses and 25 men; it is rowed across by 4 men working a bow oar, and one or two at the stern. Kuldja is 27 m. from Karatam.

MAIN ROUTE—*contd.*

15 KAINAK .. .. 13 m 4 f. From the mouth of the defile the road is smooth and good  
237 m.  
but is crossed in places by ravines.

16 KULDJA .. .. 10 m 4 f. The road continues good. At m. 8 the Ili river is crossed by a ferry. There is one boat. In 1903 the river was in 3 branches, the main stream being 300 yds. wide. The current is very swift and consequently the passage is slow.  
247 m. 4 f.

## ROUTE NO. I.—SECTION No. 4.

FROM KULDJA TO URUMCHI, *viâ* KWEITUNG.

? miles.

15 stages.

*Authority.*—Chinese Gazetteer of Hsin Chiang; Lieut Etherton, 1909.

*Epitome.*—This is a cart road. Details are unknown. Stages are as given in Chinese Gazetteer.

*Camping ground.*—Ample throughout.

*Water.*—Ample.

*Fuel.*—

*Fodder.*—

*Supplies.*—

} Limited quantities.

No. of stage and total distance.	Details.
1—5	See route 10 (stages 1—6).
101 m.	



ROUTE NO. I.—SECTION No. 4.—*contd.*

6	WU-T'AI .. .. ? m.	Cross the Ku-Sen-mu-shih-K'ō river by a bridge.
<hr/>		
? m.		
7	TO'-HO-MU-T'U-T'AI (?)	
<hr/>		
? m.		
8	TO-LI-T'AI ..	13 m.
<hr/>		
? m.		
9	CHIN-HO (AN-FU-CH'ENG)	26 m.
<hr/>		
? m.		
10	T'O-TO-K'O-T'AI ..	42 m.
<hr/>		
? m.		
11	KU-ERH-T'U-T'AI ..	17 m.
<hr/>		
? m.		
12	TUN-MU-TA-T'AI ..	20 m.
<hr/>		
? m.		
13	PU-ERH-KA-CHI-T'AI	10 m.
<hr/>		
? m.		
14	CH'ING-SUI-CH'ENG (SEHI-KO)	20 m.
<hr/>		
? m.		
15	KWEITUNG ..	27 m.
<hr/>		
? m.		

For Stages 16 to 22 Kweitung to Urumchi see Route XI.

## ROUTE NO. II.

FROM MINTAKA AKSAI TO LANGAR-I-KIKI.  
(BOKHARA BORDER) THROUGH WAKHAN  
(AFGHANISTAN) *vide* M. R. ON RUSSIAN TURKES-  
TAN, AND ROUTES IN RUSSIAN CENTRAL ASIA,  
PART III, G. S. INDIA, 1923.

No details.

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## ROUTE NO. III.

FROM PAYIK (BAYIK) TO KIZIL ROBAT (RUSSIAN PAMIRS) *vide* M. R. ON RUSSIAN TURKESTAN AND ROUTES IN RUSSIAN CENTRAL ASIA, PART III, 1923.

46 miles.

2 stages.

*Authority.*—Lieut.-Col. P. T. Etherton, 1920.

*Epitome.*—See M. R. on Russian Turkestan, G. S. India, 1914, p. 121. This route is practicable throughout for all transport other than wheeled. It is the shortest route from Hunza to the Alichur Pamir. For stages from Hunza to Paik see Route I Sec. (1).

*Camping grounds.*—Restricted in the Hunza Valley, but ample from Mintaka to Kizil Robat.

*Water.*—Plentiful.

*Fuel, fodder, and supplies.*—Limited in the Hunza Valley, but burtza, grass, and sheep plentiful on the Russian Pamirs.

No. of stage and total distance.	Details.
1 CAMP	22 m. From Paik road crosses the Karachukar river opposite
22 m.	Paik post and thence proceeds in the Paik ravine for 18 m., crossing the river several times by easy fords. Ascent to Paik Pass is over rocky moraine and alternate grass slopes and is not unusually difficult. Reach the summit at 15,400' whence there is easy descent into grassy valley. Camp at foot of pass on open downs.
2 KIZIL ROBAT	24 m. Road continues down the valley of the Paik stream to the Aksu
46 m.	river over grassy downs to Kizil Robat which is a post of 15 men in normal times.



## ROUTE NO. IV.

FROM TASHKURGHAN (SARIKOL) TO PAMIRSKI  
(PAM R) POST (MURGHABI) *viâ* NAIZA TASH.

*Authority.*—Brig.-General R. Pigot, 1923.

*Epitome.*—Possible for pony transport at all times of year.  
For details, *see* Route VII, Routes in Russian  
Central Asia, Part III, 1923.

## ROUTE NO. IV (1).

FROM TASHKURGHAN TO PAMIR POST (MURGH-  
ABI) *viâ* THE BERDISH PASS, SARIKOL RANGE.

145 miles.

stages.

*Authority.*—*Vide* M. R. on Russian Turkestan, G. S.  
India, 1914 and Routes in Russian Central  
Asia, Part III, 1923.

*Epitome.*—Suitable for pack transport only.

*Water.*—Obtainable.

*Grazing.*—Obtainable.

*Supplies.*—Nil.

## ROUTE NO. V.

FROM KASHGAR TO RANG KUL (RUSSIAN PAMIRS)  
*viâ* THE AK BERDI PASS.

149 $\frac{3}{4}$  miles.

9 stages.

*Authority.*—Lieut. Davidson, 1891 ; Major Medley, 1900 ;  
Major Geoghegan, 1907 ; Lieut.-Colonel  
P. T. Etherton, 1920 ; and "inversed"  
part by Samad Shah, 1921. (*Vide* also  
M. R. on Russian Turkestan and Routes in  
Central Asia, Part III, Routes XI and  
XIII.)

In 2 Sections as under:—

	Miles.	Stages.
1. From Kashgar to Bulunkul (INVERSE)	107 $\frac{1}{4}$	6
2. From Bulunkul to Rangkul ..	42 $\frac{1}{2}$	3
	149 $\frac{3}{4}$	9
		F2



ROUTE NO. V.—*contd.*

*Epitome.*—As far as Tash Malik the road traverses the level plain. Thence to Kuruk Kurghan the road ascends to Gez valley. In the summer (end of June to middle of September) the road is flooded in this section and an alternative route *viâ* the Tokus Davan or 9 Passes [Route V(1) may be taken, but a better route is *viâ* the Oi-tagh Jilga and Arpa Davan Route V(2).] Route V (1) is very difficult and ponies have to be unloaded in many places. The main route which is followed while the river is low is also difficult. From Kuruk Kurghan to Bulunkul the road continues up the valley, continually crossing the river, sometimes by wooden bridges. From Bulunkul to Rang Kul the road ascends the Akberdi river and crosses the pass of the same name or the Chong Kotai, the latter of which could easily be made fit for wheeled traffic.

From Rangkul to Murghabi, a distance of 31 m., there is a good road throughout.

*Camping ground.*—Ample at all stages.

*Water.*—Plentiful throughout.

*Fuel.*—As a rule sufficient for small bodies of troops.

*Fodder.*—Grazing throughout.

*Supplies.*—In small quantities. A good many sheep can be obtained at most camps.

ROUTE V SECTION No. 1. FROM KASHGAR TO  
BULUNKUL (INVERSE.)

107 $\frac{1}{4}$  miles.

6 stages.

*Water.*—Plenty.

*Fuel.*—Scarce.

No. of stage and total distance.	Details.
1 UCHKAPA	.. 31 $\frac{1}{4}$ m. For about 1 $\frac{1}{4}$ m. track goes over grassy expanse, then for a couple of 100 yds. runs between the sandy reaches of river on left and swampy ground on right—in October 1921 the swamp hollows were covered with hard frozen water. Then for about a mile it is soft sandy going (heavy occasionally), the first few



ROUTE NO. V. SEC. NO. 1.—*contd.*

100 yds. winding round foot of hills. Viewed from the right bank, the opposite bank of river appears to be an immense sandy waste. Then over alternate grassy and swampy area (the frozen ice in swamps, in October 1921, was very slippery and trying for riding and baggage ponies, camels had less difficulty) for about a mile when Langte fort is reached. The sole occupants of this place in October 1921, were a Chinese subordinate civil official and a Kirghiz family of three members. It is said Langte used to be a supply depot when the Chinese were in occupation of Murghabi. From Langte to Uchkapa is about  $9\frac{1}{2}$  m. and the track is very stony and absolutely impassable for any kind of wheels. The difficulties of the road in this part of the march are aggravated by the crossing of the Kuk Mui Naq Pass which, in its 1921 condition, is trying for laden animals, specially camels, being stiff in ascent and boulder strewn. Its southern incline is much steeper and rougher and longer than its northern. About a mile from Langte a domed hut (Tarbashi Gumbad) is passed and from here track turns into a defile and the river becomes somewhat muddy. Uchkapa now consists of 5 domed huts, though the name "Uch" implies three.

*Camping ground.*—None for the smallest force, but enough for ordinary travelling parties.

*Water.*—Plenty (1) from river which is slightly muddy, (2) from spring which is clear and within about 250 yds. N. E. of the two topmost domes.

*Fuel.*—Scarce.

*Supplies.*—Nil.

2 GEZ KARAU .. 13 m. Descend for about 3 f. and enter river bed.

44 $\frac{1}{4}$  m. At foot of descent gallery road gradually rising high above the river, branches off from track and is used when river is in flood—it was, however, in a frightful condition in October 1921, when for about 1 m. it was found absolutely impassable for laden animals and very difficult even for led horses. Leave bed of river and rise emerging on very rough ground and come to bridge at about  $1\frac{3}{4}$  m. Cross to left bank and pass an uninhabited locality called Iriku Rum about a mile further on. Then rise slightly for one m. and cross a side stream by a bridge, where is a guard of 1 man,—vicinity of bridge called



ROUTE NO. V. SEC. NO. 1.—*contd.*

Jaghauzi, which means "increase of," or "abundant Ghi" as according to local idea the place is a favourite grazing area, though in October 1921, not a blade of grass to be seen anywhere. About 500 yds. further cross to right bank by another bridge. Yet another bridge is crossed some 2 m. onward and then, after about  $1\frac{3}{4}$  m. arrive at an uninhabited spot known as Maralbuk, which is a small green patch round an isolated piece of rock with a fresh water spring running close to it. From this place to Gez Karaul it is about 3 m. This stage for practically the whole distance is unfit for wheels.

*Camping ground.*—None for the smallest force, though sufficient for ordinary travelling parties: but it was said that high above Gez Karaul, near the village, space can be found for setting up 40—45 Khirgahs. There are, however, two places *beyond* Gez Karaul, but not very far from it, on the road to Kuruk Khurghan (the next stage though a halt is not always made there), which in an emergency can be selected as camp sites for small detachments. (Description and location of these two places given in following stage.) One other place may be mentioned here as being possible in emergency for camping-ground; just beyond Gez Karaul, a short distance from the bridge, and *on the right bank* (i.e., on the bank opposite to which the track leads for the next day's march) there is a limited area which though stony may be cleared to accommodate  $\frac{1}{2}$  company infantry.

*Water.*—Plentiful.

*Fuel.*—Plenty, including a certain amount of charcoal made locally.

*Fooder.*—No grazing.

*Supplies.*—In small quantities.

*Note.*—From a little below this point the Tokez Dawn route to Tash Malik leads up a valley to the right vide Route V(1).

## ROUTE V (1) (ALTERNATE).

65 m.

3 Stages.

When the Gez river is in flood the following route can be followed between Tash Malik and Gez Karaul to the east of the river.



ROUTE NO. V. (1).—*contd.*

1 OPPOSITE OITAGH.. 15 m. Up the bed of the Gez  
 ——— AGHZI. river which has to be  
 15 m. forded twice. Camp  
 on bank opposite mouth of Oitagh Jilga.

2 KAURUK .. 25 m. Leave the Gez river  
 ——— BASHI. and ascend the Kizil  
 40 m. Jilga which is the first

of the Tokus Dakan or 9 passes. Cross four successive parallel  
 ridges by passes all of which are easy for laden ponies. Descend  
 to Khush Kishlak, a Kirghiz encampment. From the point  
 where the Gez river is left up to here there is no fresh water.  
 Now climb the Ularlik Pass which is difficult for laden animals,  
 and descend the Ularlik Jilga and ascend the Kauruk Bel  
 valley for 3 miles.

3 GEZ KARAU .. 25 m. Ascend the Kauruk  
 ——— Bel pass which is pass-  
 65 m. able for laden camels,  
 then descend to the Gez river. Ascend a steep path to the  
 Kizil Davan, the last of the 9 passes, and descend a steep spur  
 to Gez Karaul. The Kizil Davan is only passable with difficul-  
 ty by unloaded ponies, but laden yaks can cross it.

## ROUTE NO. V (2).

FROM TASHMALIK TO GEZ KARAU *via* OITAGH  
 AND THE ARPA BEL PASS (ALTERNATIVE).

48 Miles.

3 Stages.

*Authority*—C. P. Skrine Esq., September 1924.

*Epitome.*—This is by far the best route between Tashmalik  
 and Gez Karaul during the season of high water in the Gez  
 R. The only obstacles are the crossing of the Gez R., 6 m. after  
 Tashmalik and the Arpa Bel pass. The former is practicable in  
 the morning all the year round. The Pass is a very high and  
 steep one, the slope on the N. side for the last 2,550' and on the  
 South for the last 4,300' average 400. It is therefore advisable  
 to hire extra animals at Pilal and thus lighten one's load. Little  
 or no work has been done on the track which could be made  
 perfectly safe with a little widening in certain places.



ROUTE NO. V (2).—*contd.*

No. of stage and total distance.	Details.
1 AGH AGHZI (5,650' ) 23 m.	.. 23 m. The road is good for 6 m. in a S. W. direction and then crosses the stony bed of the Gez R., 1 m. broad. Early in September the river itself was $\frac{1}{3}$ m. broad and averaged $1\frac{1}{2}'$ deep. Current 4-8 miles per hour. From m. 7 to m. 13 the track is good and follows the l. b. of the river, in westerly direction. It is then diffi- cult for loaded ponies for $\frac{1}{2}$ m. after which the mouth of the Oitagh Jilga is reached and the river of the same name crossed. The current is very swift (about 12 m. per hour), and great care is necessary with loaded ponies. The track now strikes up the r. b. of the Oitagh stream in a westerly direction. The going is good the whole way to Agh Aghzi except at m. 17, where the river cuts through a red sandstone ridge and it is necessary either to ford it four times (difficult at high water even as late as mid September), or to have loads man-handled over a cliff path for $\frac{1}{4}$ m. Agh Aghzi is a Sart village of 30 houses. Fair supplies of barley and firewood can be obtained. Water good from the river which here flows in a gorge, 50-150' deep.
2 ARPA BEL 36 m.	.. 13 m. The track usually fol- lowed crosses and re- crosses the river at m. 3 and again at m. 6, but in each case a few hours work with pick and shovel would render crossing unnecessary and enable loaded ponies to keep to the right bank throughout. At m. 7 the junc- tion of the Pilal and at Oinak valley is reached; the latter which comes in from the W. is inhabited by 20 families of Kir- ghiz and the former by 25 families of Sarts. The road follows the Pilal valley up in a S-W direction for 3 m., passing the village at 8 m., and then strikes up the steeply-pitched Arpa glen.
<i>Note.</i> —The main valley comes to an end 4 m. beyond the mouth of the Arpa Glen, at the foot of the precipitous ice-clad N. face of Mt. Chakragil, 22,200'. Here there are extensive forests of fir and rich Alpine pastures supporting large herds of yaks, ponies and cattle as well as many thousand of sheep and goats. For 6 m. the track keeps up the hillside on the l. b. of the Arpa stream which it then follows until the c.g. is reached at 10,500'.	



ROUTE NO. V (2).—*contd.*

The last 2 m. are up the river bed or over boulders and progress is slow. The Arpa glen is thickly wooded with firs and firewood is thus plentiful but all the supplies must be taken up from Pilal for the night. At the c.g. there is a log hut and room for half a dozen tents.

## 3 GEZ KARAU

.. 12 m. The track follows the Arpa Stream for 1 m.

48 m.

and then strikes up a steep hillside to the left in a series of zigzags. For the last  $\frac{1}{2}$  m. of the ascent the path which is no bigger than a goat track traverses a shingle slope inclined at  $40^\circ$  and requires to be negotiated carefully. The top of the pass which is of the knife-edge type, is 13,350' above sea level. The descent of 4,300' on the S. side of the Chuchul valley, an affluent of the Gez, is even steeper than the ascent on the N., and in its present state it is dangerous in more than one place; this could, however, be remedied in a few hours by a working party. The valley bottom is reached at 5 m. and the track then follows the Chuchchul stream to its junction with the Gez R. at m. 7 (7,650). *Main Route V is joined at the point.*

*Note.*—When crossing the Arpa Bel Pass from S. to N. it is advisable to camp as far as possible up the ascent. There is room to pitch two or three tents at a height of 10,800' and again at 12,450'. Small quantities of fodder can be obtained from the Kirghiz of Chuchchul (2 families). Water from a spring near by.

MAIN ROUTE—*contd.*

## 3 TUQUI

.. 14 m. Immediately after leaving Gez Karaul cross to left bank by

58  $\frac{1}{4}$  m.

bridge and couple of 100 yds. further on pass opposite Kurghan Kul which flows into the Gez from right bank. At about  $\frac{3}{4}$  m. a small area is met which in emergency can be used for camping one company.  $\frac{1}{4}$  m. further on rise by short but steepish zig-zags to a plateau which is about  $\frac{1}{2}$  m. long. From top of plateau can be seen green patch, on opposite bank, called Sarqamush. In emergency plateau can be camping ground for an infantry regiment—water from river (though bank is high) or from stream N. E. of plateau running across track. Leave plateau and descend into

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ROUTE NO. V.—SEC. No. 1.—*contd.*

*nullah* (through which stream mentioned flows) and follow it until river bed is reached. Track now lies for a short distance over bed of river, then leaves it, goes up and traverses a flat piece of ground about  $\frac{1}{2}$  m. long, crosses Chah Chil *nullah*, and then gets into stony and undulating area some 5 f. in extent where passage of wheels would be difficult without improvement. Then winds round cliff where an artificial channel with a little water flowing through it is met, and then rising slightly, emerges on small level but stony space about 2 f. long requiring slight improvement for wheeled units. Near here, to the left, is a Kirghiz encampment called Kuturmah. Then after a few hundred yds. cross to right bank by bridge, and go up and down a spur whose two slopes are about  $\frac{1}{3}$  m., its southern incline being longer but easier than its northern: the ascent and descent partly require slight improvement for wheels. Then over stony ground for about  $\frac{3}{4}$  m., after which for just over a mile, track gets easy. Then comes broken ground and stone for about 5 f. (first half not unfit with slight improvement, second half impassable). Then after few 100 yds. pass a walled enclosure round which there is a certain amount of grazing and cultivation. Then the going is good for nearly a mile, except soon after passing the walled enclosure when a stream is crossed. At the end of the mile arrive at Kuruk Kurghan. There is good grazing and some cultivation here with 6 Kirghiz guards. At Kuruk Kurghan a cavalry regiment can be *encamped* and water in plenty, limited supplies, and abundant fuel can be found.

Leaving Kuruk Kurghan track enters river bed and shortly after the river has to be forded—the river runs in three streams here, and the average depth in them was not more than 2' in October 1921. (A good cantilever bridge, 35'  $\times$  5' is mentioned in a 1907 road report).

Then ford again the stream about  $1\frac{1}{4}$  m. further on and ford back once more some  $\frac{1}{2}$  m. later and leave river bed after about  $1\frac{1}{4}$  m. Bed of river is impassable for wheels of any sort. In 1921 remnants of a gallery road high above in the cliffs were shown but it looked as if it had been in disuse for some time. Then enter marshy and reedy area extending for about  $\frac{3}{4}$  m. The first 100 yds. or so of this was fairly dry in October 1921, but the remaining portion is very sticky and slushy. Then rise



ROUTE NO. V.—SEC. No. I.—*contd.*

to open and slightly undulating ground about  $\frac{1}{2}$  m. long—first half fit for wheel with slight improvement, second half very broken and impassible. Then  $\frac{1}{2}$  m. on reach Tuqui where is a walled enclosure with three rooms. Plenty of grass and trees round-about.

*Camping ground.*—(Somewhat damp) for two regiments.

*Water.*—Spring water just behind enclosure.

*Fuel.*—Fair amount.

*Grazing.*—Good.

*Supplies.*—Very limited.

4 TASH MALIK ..  $18\frac{1}{2}$  m. For about 3 m. in stony bed of river, fording its streams

$76\frac{3}{4}$  m. several times. Then leave it and pass small Kirghiz habitation, on a grassy plot called Khushal and situated at foot of a red hill. Beyond this spot for about 3 m., where the Citagh Aghzi defile comes in on left, the hills are either partially or wholly of red stone. Going is still very stony and unfit for wheels. Then after about 5 f., reach hamlet of 2 huts, called Buz Yalqun, built in a corner of a walled enclosure, with a pool of dirty water surrounded by trees and some cultivation. Then some  $2\frac{1}{2}$  m. more struggling with stony bed of river and fording latter over and over again. Then rise to open and undulating ground and traverse over it for about  $2\frac{1}{4}$  m. Then descend into river-bed again and struggle with it for another  $1\frac{1}{2}$  m. and leave it finally after crossing river at the ford locally known as Tunshug Karchik, and after about 6 more furlongs over ruts and rough and stony ground rise to fairly easy space and traverse over it for about  $4\frac{3}{4}$  m. to Tash Malik, the last 2 m. or so being through fields and garden lanes. Samad Shah put up at the house of Murad Haji at the instance of Tash Beg. Tash Malik is a large village of some 600 houses, a Chinese fort and garrison (1 squadron) on river side of village.

*Camping ground.*—Abundant ground about Tash Malik and on river side.

*Water.*—

*Fuel.*—

*Fodder.*—

*Supplies.*—

} Plenty.



ROUTE NO. V.—SEC. No. 1—*contd.*

5 TUQUZAK BAZAR .. 20 m. For about  $2\frac{1}{2}$  m.  
 through garden lanes  
 and fields, and ford-

96 $\frac{1}{2}$  m.

ing 2 irrigation canals (last of which is limit of Tash Malik) enter slightly stony but open country and traverse it for about 2 m. to a village called Terim. Then for about  $1\frac{1}{4}$  m. through Terim's lanes, then over alternately stony, sandy, and broken ground (not impassable for wheels though slight improvement would make it easier) for  $2\frac{1}{2}$  m. till Qumereq (Burkhitai) is reached—extensive cultivation and fields here.

*Note.—Route. V (A) Between Oi Tagh and Kashgar, the crossing of the river between Oi Tagh and Tashmalik and between Tashmalik and Burkhitai can be avoided by making a detour via Opal.*

Then winding through lanes and cultivated plots for about  $5\frac{1}{2}$  m. descend into bed of Yaman Yar (muddy and dirty water in October) and after a few hundred yards cross the river by a temporary bridge (not usable by laden animals who ford in 2-2 $\frac{1}{2}$  feet of water) and almost immediately after rise to environs of Tuman, a village. The river is the boundary between the districts or sub-districts of Burkhitai and Tokus Ak. Leave environs of Tuman shortly after and arrive at Qazaqchi about  $1\frac{1}{2}$  m. further on—the last mile or so was water logged in places, in October 1921, due to overflow from irrigation channels. Then crossing several irrigation streams arrive at Tuquzak Bazar (also called Mangan) after about  $4\frac{1}{2}$  m. (S. S. put up in house of Ruzi Chum.)

Water.— }  
 Fuel.— } Plenty.  
 Fodder.— }

Supplies.—Fair amount.

Camping ground—Abundant outside and round about village.

*Note.—Names like Burkhitai, Tuquzak, etc., in these parts imply districts or sub-districts rather than individual habitation or villages. For instance, Mangan, where S. S. halted for the night, is popularly called Tuquzak, but if inhabitants be questioned more closely they will say it is Mangan. This probably accounts for the extraordinary differences sometimes found between travelers reports and route book.*



ROUTE NO. V.—SEC. No. 1.—*contd.*

6	KASHGAR	.. 10½ m.	Good road through well cultivated country.
<hr/>			
107¼ m.			

## ROUTE NO. V. (3.)

## FROM KASHGAR TO BULUNKUL (ALTERNATIVE).

Judging from reports, there seem to be the following alternative stages from Kashgar to Bulunkul:—

1	BURKHITAI	.. 23 m.	
<hr/>			
2	TASH MALIK	.. 16½ m.	
<hr/>			
3	KURUK KARAU	.. 25 m.	
<hr/>			
	OR KURGHAN.		
4	GEZ KARAU	.. 12 m.	
<hr/>			
5	BULUNKUL	.. 28 m.	
<hr/>			
104½ m.			

The last stage from Gez Karaul to Bulunkul is given as follows:—

5	BULUNKUL	.. 28 m.	At 2 m. the road descends steeply. At 4 m. the road rises from the river. At 5 m. cross side <i>nullah</i> by cantilever bridge, 25' long × 5' wide. Next 2 m. very rough going. At 7 m. cross to left bank by cantilever bridge 40' long. The road is very rough and stony. At 11 m. cross to right bank by trestle, half cantilever bridge, 5' broad, 30' long.
<hr/>			
104 m 4 f.			

Ford the river twice (3½' deep), foot passengers can avoid this by following a gallery road, high above the river.

At 14 m. pass half way place of three mud brick kirghas or *rawats*. The road goes through Gez defile. At 22 m. reach the ruined fort of Langte Kurghan situated at E. end of Bulunkul lake. Fort guards entrance to Gez defile. At 26½ m. turn S. W., skirting lake which is pear-shaped and 5 m. long by 4 m. broad at



ROUTE NO. V (3).—*contd.*

widest part. The road follows the right bank of the river, for  $1\frac{1}{2}$  m., river having made a wide sweep round Bulunkul fort. River here is 300 yds. wide and it gradually merges into the lake of Bulunkul. *Note From Bulunkul there is a road S. W. to little Kara Kul and Tash Kurghan.* Bulunkul fort is on the right bank of Kara Kul river and at mouth of *nullah* from Rang Kul. It is about 100 yds. square with loopholed walls. Here resides the Chinese officer and a garrison which varies from 15 to 40 men.

Water.—  
 Fuel.—  
 Supplies.—

} Available.

## ROUTE NO. V (4).

## FROM TASH MALIK TO GEZ KARAU.

When Gez river is in flood the following route can be followed between Tash Malik and Gez Karaul.

- |   |              |          |  |
|---|--------------|----------|--|
| 1 | OITAG AGHZI  | .. 15 m. | Up the bed of the Gez river which has to be forded twice.  |
|   |              | 15 m.    |  |
| 2 | KAURUK BASHI | .. 25 m. | Leave the Gez river and ascend the Kizil Jilga which is the first of the Tokus Dawan or 9 passes. Cross four successive parallel ridges by passes all of which are easy for laden ponies. Descend the Khush Kishlak, a Kirghiz encampment. From the point where the Gez river is left up to here there is no fresh water. Now climb the Ularlik Pass which is difficult for laden animals, and descend the Ularlik Jilga and ascend the Kauruk Bel valley for 3 m. |
|   |              | 40 m.    |  |
| 3 | GEZ KARAU    | .. 25 m. | Ascend the Kauruk Bel pass which is passable for laden camels then descend to the Gez river. Ascend a steep path to the Kizil Dawan, the last of the 9 passes, and descend a steep spur to the Gez Karaul. The Kizil Dawan is only passable with difficulty by unloaded ponies, but laden yaks can cross it.   |
|   |              | 65 m.    |  |



MAIN ROUTE.—*contd.*

## ROUTE V SECTION NO. 2.

## FROM BULUNKUL TO RANG KUL.

1 KARASU .. 9 m. 4 f. The road runs almost  
 9 m. 4 f. W. from Bulunkul up  
 right bank of river of  
 same name to Karasu. *From here a direct road leads to  
 Murghabi up the central valley to the Akberdi Pass, 15,100'.*

Fuel.— } Available.  
 Water.— }

2 AKBERDI .. 13 m. The ascent to the pass  
 22 m. 4 f. is gradual and easy for  
 laden animals. A slope  
 of 20° leads down into a wide valley through which the Akberdi  
 stream flows. The road continues about 3 m. down stream which  
 it then leaves, running in an almost westerly direction, while the  
 stream continues towards Rang Kul but sometimes has not  
 sufficient volume to reach the lake.

3 SENG JILGA .. 20 m. From below Akberdi  
 42 m. 4 f. a splendid view of the  
 Tagharma peak is  
 obtained. The road, crossing a ridge, descends to the Kizil Billa  
 Jilga. Here Rang Kul appears and finally, on passing the  
 Chiragh Tagh, one reaches Seng Jilga, a Kirghiz pasture ground  
 in the vicinity of Rang Kul.

## ROUTE NO. VI. (Inverse).

FROM KASHGAR TO ANDIJAN *via* IRKESHTAM  
AND OSH.

286 miles.

18 stages.

*Authority.*—F. D. 1906; Campbell, 1903; Geoghegan  
 1907; Shuttleworth, 1909; Fitzmaurice  
 1921. See M. R. Russian Turkestan  
 G. S. India, 1914, page 120, and also  
 Routes in Russian Central Asia, Part III,  
 Route IX.

*Epitome.* As far as stage 6 (Sufi Kurghan) a fair road fit for  
 all arms. The track is a difficult but not serious obstacle for pack



ROUTE NO. VI (Inverse)—*contd.*

transport. Between Irkestam and Ulugchat the road is only suitable for pack transport. Thence to Kashgar it could be made possible for wheeled transport with a little work. Russian rest houses exist at all stages as far as the S. side of the Terek Pass. The Taldik Pass is much used as an alternative to the Terek, when the river Alai is low. Two battalions of Pioneers could make the section Irkeshtam-Kashgar fit for carts, and Ulugchat-Kashgar portion fit for light mechanical transport.

*Camping ground.*—Ample at each stage on this route.

*Water.*—Available in fair quantities.

*Fuel.*—Plentiful throughout at the larger camps but occasionally would have to be carried for one or two stages.

*Fodder.*—Grass at all stages.

*Supplies.*—Limited, except at Kashgar.

No. of stage and total distance.	Details.	In Russian Turkestan.
1 JULIA KUDUK	.. 16 m.	
16 m.	2 OSH .. 17 m.	
33 m.	3 LANGAR .. 20 m.	
53 m.	4 GULCHA .. 30 m.	
83 m.	5 KIZIL KURGHAN .. 19 m.	
93 m.	6 SUFI KURGHAN .. 15 m. 4 f.	
108 m.	7 SARI KUCHUR .. 10 m.	
118 m. 4 f.		



ROUTE NO. VI (Inverse).—*contd.*

8	TASHUI	.. 12 m.	} In Russian Tur- kestan.
130 m. 4 f.			
9	EKEZEK	.. 10 m. 4 f.	
141 m.			
10	IRKESHTAM	.. 11. m. 4f.	}
152 m. 4 f.			

*Note.*—There are two routes from Irkeshtam to Sufi Kurghan, the shorter, over the Terek Pass, and the other over the Taldik. They are complementary to one another. The Terek is impossible from May to August owing to floods, and the Taldik from October to April, because on the southern slopes of the Altai Mountains, and the Altai valley, there are no inhabitants to furnish supplies.

At Irkeshtam enter Chinese Turkestan.

Irkeshtam is a well built octagonal stone fort, loop-holed, with a moat. It had a garrison of about 50 cossacks (?) and some customs officials. There is a post and telegraph to Osh.

11 EGHIN .. 13 m. 4f. The road crosses a barren, flat plateau for

166 m.  $1\frac{3}{4}$  m. The river is crossed by a series of deep fords. The left bank is ascended for a mile. The road now becomes very stony. Ascend a ravine from the Kizil Su and cross a stony, barren plain for about 8 m. and the Kara Dawan (pass). The road goes over the flat Ittig plateau for 1 m. There is a fort built on the Eghin side of the river. Material for a telegraph line is in readiness along this stage, and from Eghin to Kashgar there is a Chinese *rest-house* at every stage with accommodation for 12 to 20 men.

*Fuel.*—Is scarce except in the valley of the Eghin.

12 ULUGCHAT .. 12 m. From the Kigdiz encampment and fort

178 m. of Eghin, situated in a small plain about 2 m. broad and 3 m. long, the road follows the Eghin river and the Terek Su to the junction of the latter with the Kizil Su. At Ulugchat there is a small Chinese fort with a garrison of 10 men.

*NOTE.*—It appears as if a track goes N. from here to join Routes VI (I) and VI A (I) at Oital.

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ROUTE NO. VI (Inverse)—*contd.*

- 13 UKSALIR ..26 m. 4 f. After leaving Ulug-  
chat, the Kizil Su is  
crossed twice and the  
204 m. 4 f.  
Akran river once by a deep ford 19 m. from Kosh Uki. After  
crossing the Akran and Beck Bulak passes the road runs over  
absolutely barren country of sand stone.

## ROUTE VI B.

*Note.*—At 4 m. S. of Uksalir a mule road runs directly along  
the Kizil Su valley to Opal. (From native information this road  
is said to be  $84\frac{1}{2}$  miles long. Vide Route XIII of Routes  
Russian Central Asia, Part III, 1923.

MAIN ROUTE—*contd.*

- 14 KURGASHIM KHANA 18 m. From the ruined fort  
of Uksalir the roads goes  
over undulating grass  
222 m. 4 f.  
land for 2 m. and reaches Kosh Uki where there is Kirghiz settle-  
ment, plenty of grass and a *serai*. From Kosh Uki the valley is  
open for 13 m. to Kurgashim Khana. The road is now very bad,  
passing over bare mountains and through deep ravines, so narrow  
that pack horses can only just get through. Kurgashim Khana  
is an absolute waste, devoid of all vegetation except *ishkar*  
which is fit for camels alone.

No *serai* or inhabitants.

- 15 KANJUGAN ..14 m 4 f. The road goes over a  
small pass and through  
a deep ravine where  
237 m.  
the Kizil Ui river has to be forded.

Immediately after crossing the river the ascent of the Kizil  
Dawan begins. Its ascent and descent are easy for pack animals  
but not for wheeled transport. The road then goes for 11 m.  
across the plains until Kanjugan is reached. This is an old,  
ruined, mud fort. It stands on an open plain and is surrounded  
with grass and Kirghiz settlements.

- 16 MYN U DAL ..20 m. The road from here to  
(MINYOL). Kashgar may, with  
slight improvements,  
257 m.  
be considered as suitable for wheeled traffic. The road follows  
the Kanjugan stream and enters a broad defile. At 8 m. the  
road issues into the valley of Karvankul and crosses the Uruk  
into which the Kanjugan flows. At  $10\frac{3}{4}$  m. there is a small



ROUTE NO. VI (Inverse).—*contd.*

monastery, which would give shelter to several men. Not far from here the road crosses a canal running from the Uruk to Myn Ui Dal post. This post consists of a quadrangular wall with flanking towers. There is good water along nearly the whole march. A prominent land mark on this march is an aperture through the top of a high hill to the N.

*Fuel.*—Nil.

*Fodder.*—Nil.

## ROUTE VI A AND ROUTE VI A (1).

About 9 m. S. E. of Kanjugin a road runs up the Uruk river to the Agichat post and thence to Chakmak post. This road is said to be very difficult. Another branch of this track VI A (1) appears to join R. VI at Oital crossing the Kara Jilga Pass, the Jir Ui, Sari Bel, Kogart and Jilyr Passes through the Koktan or Terek Tan range.

MAIN ROUTE—*contd.*

17 AK LANGAR .. 17 m. 4 f. Up the valley of the river Silliab. At some distance from the camping ground the road crosses the dry bed of the Ak Tash. At 6½ m. the hills cease and the road issues on the Kashgar plains. At 12½ m. the road crosses the Kichik—Andijan Canal, and about 3 m. further on it crosses a second canal. The village of Ak Langar forms the commencement of a cultivated belt which runs up to Kashgar.

*Water.*—In abundance and of good quality.

*Fuel.*—Nil

*Fodder.*—Nil.

18 KASHGAR .. 14 m. 4 f. The road is so narrow that carts can with difficulty pass. There are several bridges only fit for pack transport. At about 3¼ m. from Kashgar the road widens. The Khona Shahr (old city) of Kashgar is surrounded by a mud wall. There is cover right up to the walls on almost every side. There are four gates on the N., S., E., and W. The road from Khona Shahr to the Yangi Shahr (new city) (7 m.), lies through cultivation, occasional buildings and gardens, and is wide and good throughout. Then crosses marshy locality forming the Kizil Su valley. The river, here running in two branches is crossed 1 m. from the old city by a bridge of two spans.



### ROUTE NO. VI (I).

FROM KASHGAR TO ANDIJAN *viâ* THE SUNGEK PASS.

*Authority.*—C. P. Skrine.

*Epitome.*—It is 5 days march from Kashgar (up Route VII as far as Chakmak ? whence it branches off to the N. W. ?) to Sanju whence road goes over Usgend to Andijan. At present, December 1924, it is the most used route between Kashgar and Ferghana as Route VI is blocked by Russian and Chinese garrisons. On the Russian side Basmaches of Alaiko make the Russian garrison wary of travellers.

### ROUTE NO. VII.

FROM KASHGAR TO NARYN *via* TURGAT PASS  
(INVERSE).

219 miles.

11 stages.

*Authority.*—Yarkand Mission, 1873 ; Kostenko, 1880 ; Cobbold, 1898 ; Miles, 1902 ; Turkestan Guide, 1903 ; Macartney, 1908 ; Shuttleworth, 1909 ; Etherton, 1920 ; See M. R. on Russian Turkestan, G. S. India, 1914, page 103 and see Routes in Russian Central Asia, 1923, Part III, Route XIV.

*Epitome.*—This is a cart road, constructed under very considerable engineering difficulties, and the width here and there is only sufficient to allow of two carts passing. It is now very much out of repair and no attention has been paid to it since 1912 and carts cannot traverse it. The gradients are often dangerously steep. The tolls were exorbitant, so this route has been avoided by traders. Trade with Naryn has almost ceased as most of it goes to Andijan, so the road is of little use at present and there is scarcely any traffic on it 1924.

*Camping ground.*—Ample.

*Water.*—Plentiful throughout.

*Fuel.*—Plentiful, S. of Turgat Pass, but scarce N. of it.



ROUTE NO. VII.—*contd.*

*Fodder.*—There is good grazing N. of Turgat Pass but very little S. of it.. No cut fodder except at Naryn, and at Bashi.

*Supplies.*—Nil, except at Naryn. Sheep are generally plentiful.

No. of stage and total distance.	Details.	
1	AT BASHI	.. 26 m. 4 f.
6 m. 4 f.		
2	KARAGHOLAK	.. 20 m 4 f.
47 m.		
3	AKBAIT	.. 22 m.
69 m.		
4	KARASU	.. 15 m.
84 m.		
5	TURGAT CAMP	.. 25 m.
109 m.		
6	TOUN TUBE	.. 13 m. The ascent on the N. side of the Turgat Pass is gradual, over undu- lating grassy ground riddled with marmot holes. On top of the pass there is a pile of stones to mark the frontier between Russian and Chinese Turkistan. The road zigzags down the S. side of the pass and is a good one, the gradients are easy, and road is fit for wheel'd transport. There is a small Russian picquet in a temporary hut, 9½ m. S. from Toun Tube. The road follows the Turgat river. Toun Tube is a small Kirghiz encampment in the midst of a wind swept valley.
122 m.		

In Russian terri-  
tory.

*Camping ground.*—Unlimited.

*Water.*—Good.

*Fodder.*—Grazing good.

*Supplies.*—Sheep plentiful.



ROUTE NO. VII.--*contd.*

7 CHAKMAK .. 23 m. On leaving Tcun Tube the Turgat river is followed, then the Souk river is reached and followed down the valley. The river is crossed and recrossed. It is fordable anywhere and the approaches have been made easy. The road is fit for wheeled transport. At Kizil Kurghan there is a small Kirghiz encampment and a Chinese post of one officer and 20 men. Chakmak on the right bank of the Souk river is a Kirghiz encampment.

*Camping ground.*—Unlimited.

*Water.*—Good.

*Fodder.*—Grazing good and plentiful.

*Supplies.*—Sheep numerous.

8 AGACHI KOL .. 15 m. 4 f. The Souk river is again left, and the road trends S. E. up a valley and zigzags up a slope, strewn with great, black jagged rocks. The road on the N. side of the pass is steeper than on the S. side. The Russians have constructed a zigzag road down the S. side of the pass which is very steep and will want improving considerably before it is fit for wheeled transport. Agachi Kol (the wife's hand) is a small Kirghiz encampment.

*Camping ground.*—Unlimited.

*Water.*—Good.

*Grazing.*—Scanty.

*Supplies.*—Sheep.

9 ISLAK KURGHAN .. 24 m. The road, leaving the mountains, runs down a stony, barren valley. Islak Kurghan is a small oasis at the foot of the hills. One small stone hut; no *serai*.

*Water.*—Plentiful.

*Grazing.*—Good.

*Supplies.*—Nil, except sheep.

10 ARTUSH .. 21 m. Road fit for wheeled transport, runs due S. over a stony desert with no water. Artush is a large village, population about 3,000. A small Russian rest-house was in course of construction by the side of the cart road.



ROUTE NO. VII.—*contd.*

*Camping ground.*—Ample.

*Water.*—Good from Souk river.

*Grazing.*—Limited.

*Supplies.*—Plentiful.

11 KASHGAR

.. 14 m. The Souk river is  
crossed at 3 m. It is  
fordable at all times

219 m. 4 f.

of the year. Approaches easy. Up to Chong Karaul the road traverses a sandy desert for  $4\frac{1}{2}$  m. At Chong Karaul is a Chinese custom house. The road goes from Chong Karaul through cultivated land with small homesteads on each side. At  $7\frac{1}{2}$  m. the road runs in a southerly direction and crosses the Kizil Su river, by a narrow wooden bridge, which is usually swept away in summer when the river is in flood.

## ROUTE NO. VII (1) (Alternative).

FROM ARTUSH ? TO TURUGH ART DAWAN.

*Miles ?*

*2 stages.*

*Authority.*—Map of Sir A. Stein's explorations in Chinese Turkestan and Kansu.

*Epitome.*—From near Artush track apparently leaves Route VII and leads N. *viâ* Kare-Teke-Dawan to Paster Dawan where one route goes W. by S. to rejoin Route VII at Shakaratma and the other N. W. to rejoin at Toyin Toba.

No. of stage  
and total  
distance.

Details.

No details.

## ROUTE NO. VIII.

FROM KASHGAR TO NARYN *viâ* TEREK AND  
KAINDI PASSES. (INVERSE).

186 $\frac{1}{4}$  miles.

*8 stages.*

*Authority.*—Kostenko, Kaulbars and Reintal,  
1868 ; Kornilov, 1903. See Routes in Russian  
Central Asia, Part III, 1923.

*Epitome.*—The road is fit for pack transport throughout, the principal obstacle being the Kaindi pass. The Southern



ROUTE NO. VIII.—*contd.*

slope of the Terek pass is very steep and laden horses descend it with difficulty. There is a difficult ford over the Bashi river at stage 2.

*Camping ground.*—Ample.

*Water.*—Plentiful.

*Fuel.*—Scarce. At most stages the only fuel is dried dung.

*Fodder.*—There is, as a rule, good grazing.

*Supplies.*—Nil.

No. of stage and total distance.	Details.	
1	BURUNDU RIVER	14 m. 4 f.
14 m. 4 f.	2 JUNCTION OF THE TUZ ASHU AND KAINDU RIVERS.	19 m. 2 f.
33 m. 6 f.	3 JUNCTION OF THE TUZ ASHU AND KASH- KASU.	14 m. 4 f.
48 m. 2 f.	4 JUNCTION OF TEREK AND AK SAI RIVERS.	28 m. 4 f.
76 m. 6 f.	5 TEREK PASS	.. 28 m. The northern slopes of the pass are gentle and soft, but its southern slope is very steep and rocky, consequently fully loaded horses descend it with some difficulty.
104 m. 6 f.	6 JALANTASH	.. 26 m. 4 f. Camp on the Jal- antash river near its issue by the Kashgar picket. Ascent to the Pass gentle; descent is steep and stony.
131 m. 4 f.	<i>Fuel.</i> —Dung.	
	<i>Grazing.</i> —Good.	
7	ISSIK KARAU (PICKET.)	.. 26 m. 4 f. A very good road.
157 m. 6 f.		



ROUTE NO. VIII.—*contd.*

8 KASHGAR .. 26 m. 4 f. Over a plain; then  
 over clay hills and  
 afterwards through  
 184m. 2f. the Uzun Su defile. The river is crossed at Artu h. The road  
 is very good.

## ROUTE NO. IX.

FROM UTCH TURFAN (BASH AGHMA\*) TO  
 SLIWKINA *via* BEDAL PASS.

206 miles.

5 stages.

*Authority.*—Venukoff, Sonarguloff, 1887; Colonel Kornilov, 1903. See Routes in Russian Central Asia, Part III, 1923.

*Epitome.*—Up to stage 20 this route can be used by pack transport only; thence to Aksu wheeled transport could be employed. This is the usual route for traders going from Aksu to Kuldja, but when moving in the opposite direction the Muzart pass (Route No. I) is generally used. The latter is much shorter. The Bedal pass (stage 3) is the chief obstacle on the route. It is steep and rocky and the southern slopes are covered with ice which only disappears in July.

\**Note.*—Actually the report on this route commences at Bash Aghma, 9 m. S. W. of Uch Turfan (Route I, Sec. 2 stage 2):

*Camping ground.*—Generally available.

*Water.*—Generally obtainable.

*Fuel.*—No information. Probably grazing at most camps.

*Supplies.*—Nil. Must collect from Uch Turfan.

No. of stage  
and total  
distance.

Details.

1 JAN JUREK .. 49 m. 6 f. No fuel along this  
 route. Grass obtain-  
 49 m. 6 f. able near the Kizil Su.  
 The road is a bridle path. At m. 8 a road goes off right  
 to the Zoaka Pass. At 38 m. the Kizil Su pass is crossed. As-  
 cent very difficult, sharp stones obstruct the way; blocks of  
 ice often fall on to the road. Fierce snow storms rage here.  
 The descent is insignificant. Away to the right are seen  
 Barskoun and Zoaka passes.

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ROUTE NO. IX.—*contd.*

2 KARAWAL TAPA .. 33 m. A bridle path. Descend the broad valley of Ak Bel, which serves as a place of emigration for the Kirghiz of the Issyk Kul district, and cross the Kara Su river at 11 m. From here ascend to Ishtik Bash, crossing a small pass at 17 m., then along the defile of the Bedal Su.

*Water.*—From spring.

*Fuel.*—Dung.

3 AGACHAKUL RABAT 15 m. 2 f. The whole of this stage is difficult, even for pack animals. The ascent to the Bedal Pass (15,000') is steep and rocky and its southern slopes are covered with ice, which disappears only for a short time in July. The best time to cross is early in July. Descend by steep and frequent zigzags to the Chinese Fort of Urta Kurghan, garrison, 200 men(?). Still descending, reach Agachakul Rabat, where there are rooms for travellers and stables for horses.

*Fuel.*—Available.

*Grazing.*—Scarce.

4 UI-TAL .. .. 19 m. 2 f. Cross the Ui-tal river several times. This is a caravan halting place.

*Water.*—Good.

*Fuel.*—Good.

5 BASH AGMA .. 14 m. 4 f. The road is a pack one. Note.—Two (?) roads go hence to Kashgar (*vide* Route I).

## ROUTE NO. X.

FROM KULDJA TO DJARKENT (RUSSIAN SEMIRECHENSK). (INVERSE).

86 miles.

4 stages.

*Authority.*—Lieutenant Whitaker, 1908; Macartney,



ROUTE NO. X.—*contd.*

1908 ; Captain Shuttleworth, 1909 ; Major Greenhill Gardyne, 1911, and see Routes in Russian Central Asia, 1923, Part III, Route III.

*Epitome.*—An unmetalled cart road, very muddy in spring and dusty in summer. A Russian post road. The road is much worse in Chinese than in Russian territory. The Vyerni-Kuldja Russian telegraph line follows the road. There are no positions on this road suitable for opposing a Russian advance.

*Camping grounds.*—Ample, the ground is everywhere suitable.

*Water, fodder, supplies.*—Plentiful.

No. of stage and total distance.	Details.	
1 AKENTA ..	8 m.	Road fair but muddy and dusty when dry. Akenta is a Russian post station and settlement with a few Russian colonists.
2 KHARGOS ..	15 m.	This is a Russian garrison town.
3 SUIDUN (Ili Fu) ..	33 m.	Enter Chinese territory on leaving Khar-gos. The road is muddy and dusty according to the weather, and is worse than in Russian territory. At m. 4 cross a rough, stony, river bed, water 20' across and 1' deep, flowing S., then pass a Chinese custom house. The country is covered with long grass and scrub. At 6 m. pass Chimbaza, a village with a bazar and a small Chinese garrison. At 20 m. pass mud fort $\frac{1}{2}$ m. S. of the road. The country is flat and bare with cultivation in places. A few fortified villages are scattered over the plain and there are many ruins, the result of the Tungun rebellions. The population was decimated during these rebellions but is now increasing. Suidun is a considerable town. The Taoyin lives in Kuldja.
4 KULDJA ..	30 m.	At m. 6 pass Kura or Hsin-Cheng, the seat of the Chen Show Shih (Chinese Defence Commissioner) of Ili, 3 m. S. of the road.



ROUTE NO. X.—*contd.*

This is also the headquarters of the Ili brigade of Lu-chun. At m. 10 pass a large fortified village surrounded by cultivation. The Ili river is now 5 m. to the S. The road is rough running over small spurs intersected with *nullahs*. The country is barren steppe with patches of long reeds, grass and scrub. Occasional villages can be seen to the S. At m. 20 pass a range of low barren hills 1 m. to the S. At m. 23 enter the oasis of Kuldja. This is well cultivated. The road is very bad, through fields and hamlets, crossing many irrigation channels by rotten log culverts and muddy fords. The surface of the road is covered with deep mud or dust according to the season.

*Water, fuel, fodder, supplies.*—Plentiful.

## ROUTE NO. XI.

FROM URUMCHI TO TARBAGATAI (CHUGUCHAK),  
*viâ* MANASS AND KWEITUNG).

444 miles.

16 stages.

*Authority.*—Chinese Gazetteer of Hsin Chiang; Lieut.-Colonel P. T. Etherton, 1909.

*Epitome.*—This is a cart road; passable for wheeled traffic; details are unknown. Stages are those given in the Chinese Gazetteer. The telegraph line from Urumchi to Tarbagati follows in the neighbourhood of the road throughout. *See routes in Russian Central Asia.*

*Camping ground, water, fuel, fodder and supplies.*—Ample.

No. of stage and total distance.	Details.	
1	CH'NAG-CHI HSIEN	26 m. Cross rivers <i>en route</i>
26 m.		
2	HU-T'U-PAO	.. 31 m. Cross a branch of the Kityn river <i>en route</i> .
57 m.		
3	T'A-HSI-HO	.. 26 m. Cross a branch of Kityn river <i>en route</i> .
83 m.		



ROUTE NO. XI.—*contd.*

4	MANASS (SUI-NING- CH'ENG).	25 m.	
108 m.	5	UL-AN-USSU	.. 22 m. Cross Manass river on leaving Manass.
130 m.	6	AN-CHI-HAI-T'AI	.. 31 m.
161 m.	7	KWEITUNG (KUEI- TUN-T'AI).	26 m. <i>Here the road bran- ches, one leading straight on to Chinho and eventually to Ili Fu, and the other leading N. to Tarbagatai.</i>
187 m.	8	KU-ERH-PI-LA-T'AI	30 m. The road leads N. from Kweitung.
217 m.	9	SHA-LA-WU-SU-T'AI	36 m.
253 m.	10	OLONBULAK	.. 34 m.
287 m.	11	WU-ERH-KO-T'U-PU- LA-K'O-T'AI.	26 m.
313 m.	12	YA-MA-T'U-T'AI	.. 34 m. This is a tiny settle- ment and consists of a guard house and a few Chinese soldiers. There is a <i>serai</i> and half a dozen new (in 1909) huts.
347 m.	13	THUL	.. .. 10 m. A tiny settlement with a <i>serai</i> .
357 m.	14	SARI CHULSIN (SHA- LA-HU-LU-SU- T'AI ?).	25 m. A small village with an inn.
382 m.	15	SE-TE-ERH-MU-TO- T'AI.	34 m.
416 m.			



ROUTE NO. XI.—*contd.*

16    **TARBAGATAI** (CHU- 31 m. This is a walled town  
 ——— **GUCHAK OR SUI-CH-** of some importance,  
 444 m. **NG CH'ENG**) where resides the mili-  
 tary Governor of the district Tarbagatai. *From it roads lead*  
*N. W. to Sergipil and Semipalatinsk; N. to Zaisan in Russian*  
*territory; and E. to Sharasume and Kobdo in Mongolia.*

## ROUTE NO. XII.

• **FROM KASHGAR TO TUN-HUANG (SA-CHOW),**  
**PROVINCE OF KANSU.**

In 4 sections as under :—

	Miles.	Stages.
Sec. 1. From Kashgar to Yarkand ..	127½	5
„ 2. Yarkand to Karghalik (See Route XIV, Part 1, stages 26 and 27) .. ..	17	1
„ 3. Karghalik to Khotan ..	154	10
„ 4. Khotan to Keria, Cherchen, and Tun Huang .. ..	937	50
Total ..	1,235½	66

**SECTION No. 1. FROM KASHGAR TO YARKAND *via***  
**YANGI HISSAR.**

127½ miles.

5 stages.

*Authority.*—Major Fielding, 1907; Geoghegan, 1907;  
 Captain A. Samad Shah, 1921; Lieut.-  
 Colonel Broke Smith, 1922.

*Epitome.*—The road from Kashgar to Yarkand is regularly  
 used by wheeled transport. It is unmetalled and in very bad  
 condition. The road constantly crosses muddy streams and  
 canals, only the larger of which are crossed by wooden  
 bridges, and is unfit for motor traffic.

See also “N.B.” on p. 92.



ROUTE NO. XII.—*contd.*

*Camping ground.*—Unlimited at each stage.

*Water, fuel, fodder and supplies.*—Plentiful.

No. of stage and total distance.	Details.
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<p>1    YAPCHAN</p> <hr/> <p>27 m. 4 f.</p>	<p>.. 27 m. 4 f. The road leads through cultivated country crossing several small streams and canals, the largest of which are the Tozgun and the Kara Su. The town of Yangi Shahr and the villages of Kash Robat, Turmalak and Tozgun are traversed <i>en route</i>. The elevation of Yapchan is 4,210'.</p>
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*NOTE.*—A short cut, which shortens the total distance of this stage by 5 m. according to native calculation, exists and leads off to the right soon after Yangi Shahr; but some bridges encountered there are not wide enough for very broad axled wheeled traffic.

*Camping ground.*—Immediately before reaching Yapchan, for one division though possibly not in a compact body owing to marshy nature of ground.

<p>2    YANGI HISSAR</p> <hr/> <p>51 m.</p>	<p>.. 23 m. 4 f. The road is much cut up by small canals. Soil is generally sandy. Yangi Hissar is a large town with fort and contains about 4,000 houses. The river is crossed by a 2-spanned timber bridge about 60' long. Altitude 4,320'.</p>
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*Camping ground.*—About 3 m. S. E. of town, for a brigade but on separate sites; if for larger force, space can be found in the surrounding fields, though possibility of standing crops should be considered.

<p>3    KIZIL BAZAR</p> <hr/> <p>79 m. 4 f.</p>	<p>.. 28 m 4 f. Fit for wheeled transport throughout, though heavy going in places. Cross the Yangi Hissar river and over a flat plain irrigated by small water courses, passing the scattered villages of Kelpin, Topluk, Kosh-gumba, Kuduk and Chamulung, where water can be obtained. Kizil has a small <i>bazar</i> and the usual <i>serai</i>. Altitude 3,910'. The oasis here is more thinly traced than most others.</p>
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ROUTE NO. XII.—*contd.*

*Camping ground.*—For two bigades, just before reaching Kizil Bazar in the fields, and for 2 divisions, and more, about  $\frac{1}{2}$  mile to E. and S. E. in plain.

[Route I. G.—From Kizil Bazar a track leads W. to Iggiz Yar, Route, I, Section 1, (Stage 12)].

4 KOK ROBAT Lr\* .. 26 m. Suitable for all arms.  
 105m. 4f. The road goes over the dry bed of the Kizil stream, coming from the Kizil Tagh on the W. ; thence over flat waste for about 14 m. to Ak Robat ; here is a well of slightly brackish water, almost 50' deep and 2' 6" in diameter, the only water in this stage. From here the road skirts the Hamed-i-Dasht, a barren desert without habitation or cultivation. At about 17 $\frac{1}{2}$  m.(?) pass the village of Karakum and about here the road crosses the Urpi canal by a wooden bridge which would take lorries and then goes along the N. wall of the fort. (Altitude 3,923'). At Kok Robat there is a Chinese court house and a small bazar. Altitude 3,830'.

*Camping ground.*—For 2 Divisions or more in the plain.

5 YARKAND .. 22 m. The road is now (1922) in very fair condition though sandy and deep in parts, 10' to 20' wide, trees planted on each side (would take horsed Field Artillery).  
 127m. 4f.

After leaving Kok Robat Lr. cultivation, road skirts the desert for 4 m., after passing through a small bazar it goes through marsh, overgrown sand hills, and cultivation. From 15 m. cultivation is continuous until the new city is reached.

\*Lr=Langar.

## Section No. 2.

FROM YARKAND TO KARGHALIK.

See Route XIV, Sec. 1, Epitome and stages 26 and 27.



## ROUTE No. XII—Section No. 3.

FROM KARGHALIK TO KHOTAN, *viâ* GUMA.

154 miles.

10 stages.

*Authority*.—Dr. M. A. (Sir Aurel) Stein, 1900.

*Epitome*.—This is a desert route throughout and quite practicable for wheeled transport and artillery. In summer, the Karakash river, which is liable to flood from the melting of the snows in the mountains to the S., is unfordable. The road itself is covered with sand and is not well defined.

*There is an alternative route viâ Sanju and the foot of the Kuen Lun, Vide XIV, XIV-J., 15 C., 15 D. This is a little longer, but is the shortest route to Khotan for a force moving from the direction of Shahidulla.*

In June 1915, Sir P. M. Sykes travelled from Karghalik to Khotan with three wagons, each drawn by four ponies. A fifth pony was added for difficult stages. The sand was trying in the first stage out of Guma, and between Pialma and Zawa. The Sanju route is not practicable for wagons.

Lightly laden carts had no difficulty in 1919; two ponies were sufficient for a "mapa" on most stages, but three were taken out on the sandy stage.

*Camping ground*.—No information.

*Water*.—Scarce but obtainable at all camps.

*Fuel and supplies*.—Difficult. At Khotan and Guma for 1 Division, and could be arranged for at other stages.

No. of stage and total distance.	Details.
1 KASH LANGAR	.. 18 m. Leave Karghalik by
or	the Khotan gate.
18 m. AKIN	After a mile the road
leaves the oasis and enters barren desert. Two miles further on, traverse the little oasis of Besh-arik beyond which the desert is re-entered. The road is marked out by posts at short intervals. At Kash Langar there is a large <i>serai</i> of hard burnt bricks.	

[*Note*.—For Akin, go from Besh Arika desert to small village of Akin (altitude 4,700') at 14 m., with good water, and a fair quantity of supplies. This makes a much better stage than Kash Langar.]

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ROUTE NO. XII.—SECTION No. 3.—*contd.*

*Water.*—From a tank filled once a week by a small canal from the outer hills.

2 CHULAK LANGAR.. 15 m. (*This stage appears to start from Akin and not Kash Langar, though the total mileage shown is as from Kash Langar. This makes the totals too great by 4 m.*)  
 33 m. (4,850') The road lies along the southern edge of the desert. No water courses reach it from the hills. Chulak Langar stands on the edge of a broad sandy ravine descending from the hills and has a fine *serai*. Enter desert with a good deal of moving sand. At 4 m. Kosh Langar (probably the Kash Langar of stage 1) with a large tank of water. One family in *serai* sells a few supplies. Thence desert, but good going to Chulak Langar. Of recent years a village has grown up, and supplies are procurable.

*Water.*—good.

3 GUMA .. ... 23 m. This is a long march.  
 56 m. The road leads over bare gravel and sand for 10 m. to Silok Langar, a small collection of mud hovels with a little tank of water fed by a small water course. Beyond this to Hajib Langar, at m. 12½, there is some scrub. This is another small wayside station. Beyond it, the ground is cut up by shallow rubble strewn ravines. At m. 18½, cross a dry river bed and enter the oasis of Guma. At first the fields and groves of trees are half buried under drifting sand. A 40' bank is then climbed and fertile fields and groves of trees are entered. A large canal skirts the Guma bazar. There is a track practicable for wheels from here to Sanju (*vide* Route XIV F. and XIV, part 1).

*Supplies.*—Cattle, fruit, and other supplies available.

4 MUJI .. .. 21 m. Leave the oasis and cross the desert. At 5 m. cross a broad dry river bed. Then cross a narrow cultivated belt round Mokula and re-enter the desert. Muji is a small village.

5 ZANGUYA .. 14 m. Before reaching the village, cross a stream which is dry during the season of irrigation. Zanguya is an extensive oasis containing some 500 houses.  
 91 m.



ROUTE NO. XII.—SECTION No. 3.—*contd.*

6 PIALMA .. .. 19 m. For 2 m. the road leads through irrigated land, but, owing to the scarcity of water, only one quarter of the oasis is put under cultivation each year. Light dunes of sand appear at the middle of the march and continue up to a strip of raised ground known as Bel-kum. Pialma is the last oasis of the Karghalik district and contains 100 houses.

7 AK LANGAR .. 14 m. The road leads over an absolutely barren plain of hard loess and gravel. Two pillars on the road a few miles from Pialma mark the boundary between Karghalik and Khotan. At Takhtu-wen, 7 m. there is a well nearly 200' deep.

*Water.*—From this well.

8 TARBUGAZ LANGAR 10 m. The road continues through a sandy desert. Past the shrine of Kaptar Mazar where there are sheds in which reside thousands of pigeons. 3 m. beyond this Tarbugaz Langar, a solitary hut in a marshy plain.

9 YOKAKUN .. 12 m. After leaving Tarbugaz, enter cultivated plain and at 3 m. pass the mud fort of Zawa situated in an oasis, altitude 4,350'. The road lies through well cultivated fields dotted with hamlets and is lined with poplars and willows. The road is very dusty. At 10 m. cross bed of Karakash river. This is  $\frac{3}{4}$  of a mile across but the actual river is only some 30 yds. wide and 1 or 2 feet deep in October, though, during the summer months, it sometimes presents a serious obstacle: 11½ m. beyond the old bed, cross the so-called new bed, and camp just beyond at the little hamlet of Yokakun.

10 KHOTAN .. .. 8 m. The road leads through cultivation. The Yangi Shahr or new city is a large, bastioned fort built by the Chinese. Beyond is the old city.



# ROUTE No. XII—Section No. 4.

FROM KHOTAN TO TUN-HUANG (SA-CHOW)  
PROVINCE OF KANSU, FOR ANHSI AND SU-  
CHOW *viâ* KERIA, CHERCHEN, CHARKHLIK  
AND THE LOB DESERT.

937 miles.

50 stages.

*Authority.*—M. A. Stein, 1906-07.

*Epitome.*—This route skirts the southern edge of Takla Makam and Lob deserts, and is occasionally used by caravans for trade purposes. As far as Charkhlik, it lies through a chain of oases, and the route presents no great difficulties.

Beyond that, between Charkhlik and Tun-haung, there is a long and difficult stretch of salt desert to be crossed, which is only practicable in winter and by small detachments.

The only suitable form of transport on this route is the Central Asian camel, which can cope with the scarcity of water and bad grazing.

*Camping ground.*—No information.

*Water.*—Plentiful, as far as Nia, at most stages. As the route proceeds further E., water gets scarce and more brackish, until in the stages across the Lob Desert it can only be obtained by digging in likely places in the sand.

*Fuel.*—As a rule obtainable, on desert stages from dead trees.

*Fodder.*—Very scarce except at large oases of Khotan, Keria, Nia, Cherchen and Charkhlik, and at Tun-haung. As a rule grazing for camels.

*Supplies.*—Very scarce. Obtainable at Khotan, Keria, Nia Cherchen, Charkhlik and Tun-haung.

No. of stage and total distance.	Details.
1 LOB BAZAR	.. 20 m. Cross the Yurungkash river, which is a difficult obstacle in summer, on leaving Khotan. The road lies through cultivated country, well irrigated by canals from Yurungkash river.



ROUTE NO. XII.—SECTION NO. 4.—*contd.*

- 2    BESHTOGRAN- 15 m.  
 ——— GAR.  
 35 m.
- 3    CHIRA    ..    .. 20 m. The road lies across  
 ——— the desert. Chira is  
 55 m. the chief village in a  
 large oasis containing some 3,500 households.  
*Water.*—From the Chira river.  
*Supplies.*—Available.
- 4    ACHMA    ..    .. 20 m. Road lies through  
 ——— the Dumuka oasis.  
 75 m. Achma is a small new  
 village.  
*Water.*—From springs.
- 5    KUMBAGH    .. 18 m. At 15 m. pass the  
 ——— Shivul swamp and a  
 93 m. luxuriant belt of trees.  
 Thence 2 m. over the desert to the edge of the Keria oasis,  
 where Kumbagh is situated.  
*Supplies.*—From Keria.
- 6    KERIA    ..    .. 10 m. Through the cultivat-  
 ——— ed oasis to Keria,  
 103 m. which is the head of a  
 large district. Keria is a large and thriving town.  
*Supplies.*—In large quantities.  
*Water.*—Plentiful
- 7    UITUGRAK    .. 14 m. Cross the Keria river  
 ——— bed, which is  $\frac{1}{4}$  m.  
 117 m. across, dry in winter  
 but probably forming a difficult obstacle in summer. Pass the  
 small villages of Besh Tugrak and Ghadhang. At 2 m. enter  
 the desert. On the right a bare plain of coarse sand and  
 pebbles slopes up to the mountains on the S.  
 Ui Tugrak is a small oasis containing altogether some 200  
 houses, scattered about in small hamlets.
- 8    YASYULGUN    .. 17 m. The road leads over  
 ——— the pebbly *sai*. High  
 134 m. sand dunes to the N.



ROUTE NO. XII.—SECTION No. 4.—*contd.*

At 16 m. cross a broad, shallow, river bed, dry in winter. Yasul-gun consists of a dozen mud hovels surrounded by a few fields.

*Water.*—From a well, said to be 240' deep.

- 
- 9 OWRAS LANGAR .. 11 m. The road lies over a stony *steppe*. Owrass Langar consists of a solitary hovel.  
145 m.  
*Water.*—Nil.

- 
- 10 NIA .. 24 m. The road lies over pebble-strewn *sai* crossed here and there by off-shoots from the sand dunes to the N. At 16 m. a little tamarisk and brushwood appear. At 22 m. enter, at hamlet of Kang Sarigh, a well-cultivated oasis. Nia is the chief village of the large and fertile oasis.  
168 m.

*Water.*—Plentiful.

*Supplies.*—Plentiful.

- 
- 11 KALTA KERIM .. 18 m. The road lies through the oasis and then through the jungle.  
187 m.  
Swampy in places.  
*Water.*—From spring.  
*Fuel.*—Plentiful.

- 
- 12 SHITALA DARYA .. 12 m. Through jungle.  
199 m.  
*Water.*—From river.  
*Fuel.*—Plentiful.

- 
- 13 YARTUNGAZ RIVER 15 m. Cross a line of high dunes, and then cross desert.  
214 m.  
*Water.*—From river.

- 
- 14 YOKE-TUGRAK .. 25 m. Through desert. Camp at a small patch of tamarisks and *tug-raks* (poplar trees).  
239 m.  
*Water.*—From well, brackish.  
*Fuel.*—In small quantities.



ROUTE NO. XII.—SECTION NO. 4.—*contd.*

- 15 KOKE JIGDAR OGHIL 21 m. Across desert. Camp  
near right bank of  
Endere river, which is  
260 m.  
crossed just before reaching camp.  
*Water.*—Good, from river.  
*Fuel.*—Abundant.  
*Fodder.*—Grazing good, both for ponies and camels.  
*Supplies.*—In small quantities from surrounding cultivation.
- 16 SHUDANG OGHIL .. 25 m. Pass Endere, then  
across desert, on which  
there is a certain  
285 m.  
amount of vegetation.  
*Water.*—From a well.  
*Grazing.*—For camels.
- 17 CHENGELIK .. 20 m. Desert with some vegetation.  
305 m.  
*Water.*—Brackish from well.
- 18 YANTAK KUDUK .. 20 m. Less vegetation, road  
runs through dunes.  
325 m.  
*Water.*—Brackish from well.
- 19 CHERCHEN .. 30 m. Across desert. Before  
reaching Cherchen  
cross a dry canal and  
355 m.  
enter oasis. Cherchen is the centre of a large and growing  
oasis with at least 500 families.  
*Supplies.*—Plentiful.  
*Water.*—Good.
- 20 YOGHAN DONG .. 12 m. The road leads down  
the right bank of the  
Cherchen river.  
367 m.  
*Water.*—Good.  
*Fuel.*—Plentiful.
- 21 TALLIK TOKAI .. 20 m.  
387 m.  
*Water.*—Good.  
*Fuel.*—Plentiful.



ROUTE NO. XII.—SECTION NO. 4.—*contd.*

22 CAMP ON BANK OF 10 m. The route leaves the  
 CHONG KUL LAKE. river and passes along  
 397 m. the southern edge of  
 a series of marshes, running parallel to the river, and probably  
 marking its old bed. Groves of *tugrak* trees at intervals.

*Water.*—Good.

*Fuel.*—Plentiful.

23 PATMA OLANG .. 18 m. Pass dense reed beds.  
 415 m.

24 AKILEK .. .. 15 m. The river bed widens  
 430 m. and the road leads  
 straight, cutting across  
 numerous dry channels and over salt *steppe* which try camels'  
 feet.

*Camp.*—In a grove of *tugrak* trees.

*Fuel.*—Plentiful.

*Water.*—Good.

25 YAKKA TUGRAK .. 22 m. Follow the river as  
 452 m. far as the grazing  
 ground of Lakshkar  
 Satma; then strike S. E. across a belt of high sterile dunes.

*Camp.*—At edge of sandy jungle.

*Fuel.*—Plentiful.

*Water.*—From shallow wells, undrinkable.

[Route XII (4).—From Lashkar Satma another route  
 follows the Cherchen river, 4 stages to Jigdalik Oghil  
 and thence 2 stages to Charghlik.]

26 PAILU .. .. 10 m. Cross dunes of con-  
 462 m. siderable size. Pailu  
 is a point on the road-  
 side where a wooden post marks the boundary between the  
 districts of Keria and Chargalik.

*Water.*—From well, fair.

*Fodder.*—Grazing for camels and ponies, fair.



ROUTE NO. XII.—SECTION 4.—*contd.*

27 VASH-SHARI .. 12 m. Through desert for the first 4 m. Then cross an old, dry canal. At 474 m. cross old flood-beds of the Vash-shari river in dense tugrak jungle. Thence pass through cultivation to Vash-shari, which is a modern colony of some 20 families. There is a decent rest house.

*Water.*—Good and plentiful from river.

*Fodder.*—Grazing good for camels and ponies.

28 TATLIK BULAK .. 22 m. The road lies over desolate glacia of gravel with occasional patches of tamarisk and thorny scrub. Camp near a narrow belt of marsh vegetation by the Tatlik Bulak river.

*Water.*—Plentiful.

*Fodder.*—Grazing good for camels and ponies.

29 CHARGHLIK .. 24 m. Up to 18 m. the road lies across the same country as in the preceding stage. Then enter oasis. Pass straggling fields and reach the river bed, in which there is a little water in winter, but which is sometimes difficult to cross in summer. Charghlik is on the right bank. It is the central village of a fair sized oasis, containing altogether some 500 families. A few camels and donkeys can be obtained.

*Water.*—Good.

*Supplies.*—In small quantities.

[NOTE.—From here Route XIV P (vide Lateral Routes) goes N. into the desert to Tokum and Kurla.

Route XIV P (1) goes from Tokum to Merdek Kol, and ancient site of Lou-lan, whence it returns to Abdal (see stage 32). There are no details of Route XIV P (1).]

30 YANDASHKAN .. 20 m. For 2 m. pass through well tilled fields and then reach a narrow belt of arable land called Tattran, which is cultivated every third year. Cross a shallow river, then continue over barren desert. Yandashkan is near two shallow wells among high cones of sand with dead tamarisks.

*Water.*—Plentiful and fairly good.

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ROUTE NO. XII.—SECTION No. 4.—*contd.*

- 31 MIAN TARIM .. 30 m. The road leads N. E.  
across the desert to  
the Bjahan Sai river.

570 m.

Cross the bed of the river which is almost dry and frozen in winter. Then through a belt of sandy jungle and, crossing a small canal and some fields, camp close to a luxuriant belt of tugrak jungle by the side of a shallow stream.

*Water and fuel.*—Plentiful.

## ROUTE XII (7).

NOTE.—A track leads from here direct to Dunglik, stage 33, distance 27 m.

- 32 ABDAL .. 19 m. The track leads N.  
along the Mian stream,  
for about 10 m.

589 m.

through gradually thinning jungle. The stream then disappears in a series of shallow pools. Then cross bare salt *steppe* for 9 m. to Abdal. This is a wretched hamlet, inhabited by Loplik fishermen, on the Tarim river.

*Water.*—Plentiful.

*Fodder.*—Grazing good for ponies and camels.

- 33 DUNGLIK .. 24 m. The road leads S. E.  
across marshy ground.  
Then over a salt en-

613 m.

crusted waste, sighting small reed-fringed lakes to the N. Dunglik is situated on a small stream known as the Aschi Bulak or Asghanlik.

*Water.*—Is brackish, and ice should be melted for drinking purposes.

- 34 CAMP .. 15 m.

628 m.

*Water.*—Nil. Ice should be carried from Dunglik.

*Fuel.*—In small quantities.

- 35 CHINDEILIK .. 24 m. The route leads N. E.  
After 2 m. skirt the  
shore of a dry lake.

653 m.

Then turn to the E. keeping close to the old shore-line. At about 12 m. cross a succession of flood channels of the Lachin



ROUTE NO. XII.—SECTION No. 4.—*contd.*

river. At 19 m. the route descends steep clay cliffs to the dried lake bed. Chindeilik is situated on boggy ground.

*Water.*—From ice on surface of salt springs.

36 LOVOZA (LOWAZA) 26 m. Follow foot of lake shore, which is marked by steep clay cliffs

679 m.  
40 to 50' high for 2 m. The cliffs then turn off S. E. forming a large bay. The track cuts across the dry, salt-encrusted lake bed for 16 m. The shore of the dry lake then draws near, and the track climbs up and crosses a promontory for  $1\frac{1}{2}$  m. It then descends again to the foot of the cliff and continues along it to camp. At Lovoza there is a patch of reeds and low scrub.

*Water.*—From a spring. Brackish but drinkable.

37 KOSHE LANGZA .. 22 m. For 7 m. the road cuts across another bay of the dry lake bed, then

701 m.  
strikes along the line of the littoral terraces. It then passes along the top of these some 40 to 50' above bed of the lake. At 17 m. cross a shallow nullah, covered with plentiful tamarisk growth. There is here a stretch of salt marsh, fed by springs and covered with reeds at the foot of the clay terraces. Finally the route drops to the foot of the old lake bank, which is now 100 to 120' high. Koshe Langza is a good halting place on reed-covered, peety soil.

*Water.*—From numerous springs, fair.

*Fodder.*—Grazing good.

38 PANJA .. 17 m. For 10 m. the route skirts the lake bed and lies over a bare

718 m.  
waste of gravel and coarse sand, crossing salt-encrusted inlets in places. Then traverses a broad belt of tamarisks and other scrub. During the last part of the march there are numerous wind eroded terraces to the right.

*Water.*—Good.

*Fodder.*—Grazing for camels.

39 ACHCHIK KUDAK 23 m. Follow a marshy strip of ground covered with tamarisk along the old

741 m.  
lake bed ; numerous springs, brackish but drinkable by animals.



ROUTE NO. XII.—SECTION NO. 4.—*contd.*

At 15 m. pass an isolated, clay terrace and, towards the end of the march, after leaving the marsh, these terraces become common on both sides of the road.

*Water*.—From a well, brackish but drinkable.

40 KUM KUDAK .. 22 m. The route lies N. E.

763 m. For 12 m. skirt the line of dried up salt marshes with reeds and tamarisk. The salt crust then disappears and its place is taken by reed-covered *steppe*. Occasional clay terraces are passed. The last part of the march lies over light drift sand and scattered tamarisk cones.

*Water*.—Slightly brackish, from a well 4' deep.

41 CAMP .. 17 m. The salt covered lake

780 m. bed is now finally left, and the road runs N. E. up a broad, but well-marked, valley with the Kuruk Tagh in full view, to the N. Camp at 17 m. behind a clay promontory, amongst abundant scrub.

*Water*.—Obtained after digging to a depth of 3', good.

42 CAMP .. 18 m. For 10 m. the route

798 m. skirts the northern edge of spurs leading down from the high clay ridge to the S. Pass the wells of Yantak Kuduk, the usual halting place. Camp among low tamarisk cones.

*Water*.—Good, after digging for 4'.

43 BESH TUGRAK .. 20 m. For 5 m. skirt the

818 m. foot of the high dune-covered ridge. Reeds and scrub to the N. At 12 m. pass the well of Kosh Kuduk. Beyond this cross a ridge by a narrow saddle. Pass stretches of thorny scrub and reeds. At Besh Tugrak there are five wild poplars.

*Water*.—Good, from 2 wells, 5' deep.

*Fodder*.—Grazing good.

44 CAMP .. 20 m. The route leads E.

838 m. for 4 m. over reed and scrub covered ground. Then cross high dunes of sand which stretches across



ROUTE NO. XII.—SECTION NO. 4.—*contd.*

the valley to the N. from a high ridge to the right. Vegetation becomes scanty. At 9 m. reach the western edge of a dried lake bed. Follow this for 2 m. to its eastern edge. The track now turns S. E. and, crossing a promontory of drift sand, reaches a further bay of the lake basin. This is much cut up into terraces by wind erosion. Skirt the southern edge of the basin for 7 m., crossing two more sand promontories *en route*. Pass some scrub covered cones of sand and then enter a belt of clay terraces, where camp. A guide is necessary for this part of the route.

*Water*.—Nil.

*Fuel*.—A certain amount of dead tamarisk scrub.

45 TOGHRAK BULAK... 17 m. For 2 m. thread a maze of steep clay terraces and then emerge on 855 m. N. edge of lagoon-like, dry bed, stretching S.-W. Continue S.-E. and, after a mile, enter the deeply cut flood bed of Su-lo Ho, 1 m. wide. Move up its bottom, the sand changing to gravel, until a narrow gorge is reached opening into it from the S. Follow up this between steep cliffs of consolidated gravel and, after a stiff climb, reach a flat pebble-covered plateau 100' above the bed of the river. Progress is easy. For 10 m. the only features of interest are two or three shallow depressions covered with reeds. The track is well-marked and passes one or two ruined towers. Toghak Bulak is situated in a little valley with reeds and scrub by the side of a streamlet which is frozen hard in winter.

*Water*.—Brackish but drinkable for animals. Men should use ice.

*Fuel*.—Plentiful from dead tugrak trees.

46 CAMP .. .. 17 m. The track leads E. passing many ruined towers. At m. 5 cross 872 m. a bare gravel plateau. For 2 m. before reaching camp pass through high scrub and groves of tugraks. At m. 16 pass a small salt stream. Camp on the margin of salt lake.

*Fuel*.—Plentiful.

*Fodder*.—Grazing good for both camels and ponies.



ROUTE NO. XII.—SECTION No. 4.—*contd.*

47 CAMP .. .. 17 m. Follow the southern shore of the lake for 1½ m.; then cross a ridge down the side of a second lake. At m. 5 pass a ruined tower near southern end of second basin. For the remainder of the stage such towers can be seen, forming a line along the horizon to the N. The route follows the side of long depression covered with reed beds for 10 m. then a ruined fort is reached. From here cross a sterile gravel plateau getting nearer and nearer to a wide marshy basin stretching E. and W.

Skirt the deep bank of this for a m. and then reach a huge ruin with a frontage of 404', the walls of which rise to a height of 25'. About 1 m. further on camp near beds of dry reeds.

*Water.*—From springs.

48 YANTAK KUDUK. 26 m. The track is now more clearly defined being marked by wheel ruts of Chinese carts used for bringing fuel into Tunhuang. It leads through belts of fine jungle and scrub with good grazing. At 9 m. reach Shu-Yu-T'ou, a c. g., used by men collecting fuel. The route continues eastwards to m. 15 crossing a series of gravel-strewn ridges and reed-covered depressions. Then cross a wide bay, bare of vegetation and covered with clay terraces. After 3 m. of this, emerge on a level flat, extending unbroken to a sheet of deep water 3 or 4 m. to the N. This is part of the Kara Nor lake. Pass a ruined watch tower overlooking the road, which at this point turns S.-E. Cross another bay. The road then leads up a gently sloping alluvial fan to a spring at Yantak Kuduk.

*Water.*—From a spring-fed pool, quite fresh.

*Fodder.*—Grazing scarce.

49 CAMP ON EDGE OF .. 17 m. For 16½ m. the route  
TUNG-HUANG leads over a waste  
932 m. OASIS. of gravel with no vegetation, crossing two dried river beds, the second of which has some reed beds. Then enter the well cultivated oasis. Camp by a clump of elms near an old Buddhist shrine, ½ m. further on.



ROUTE NO. XII.—SECTION No. 4.—*contd.*

*Water.*—Plentiful.

*Supplies.*—Of all kinds from Tung-Huang.

50 TUNG-HUANG OR 5 m. Good road through  
SA-CHOW. well cultivated oasis.

937 m. Pass many farms and  
ruined walled villages. Cross the Tang Ho river by a dangerous,  
rickety bridge and pass through a ruinous gate into the main  
street. Tun-huang is a large and prosperous town in the  
district of Kansu. It has a garrison.

*Camp.*—In a large orchard near the S. gate.

*Supplies.*—Of all kinds plentiful.

## ROUTE NO. XII (1). (Alternative).

FROM NIA TO CHERCHEN *viâ* SURGHAK.

*Miles ?*

*16 stages.*

*Authority.*—Map of Sir A. Stein's Explorations in Chinese  
Turkestan and Kansu.

*Epitome.*—No specific data.

No. of stage and total distance.	Details.
1 SURGHAK (8,068').	.. Gold field; distance about 30 m. Direction southerly. Pass Kok- jigda, 3 m., Toghai Langar, 13, m., Yakalat, 19 m., where route closes in to Ulugh-sai. From Surghak, a Route (15-L.) leads to Polur.
2 TALKAULIK (8,836')	.. Cultivation.
3 KICHIK SARAI (9,510').	.. Cultivation.



ROUTE NO. XII.-1 (ALTERNATIVE)—*contd.*

4	YARIGH	.. Cultivation.
—	(8,170')	
5	TOLAN GHUJA	.. Cross Yarigh, Sujet-Sai, Yul-ghun-bulak-sai.
—		
6	KARASAI	.. Cross Itullah-Khan-sai.
—	(9,600')	
7	CAMP ..	.. Along Ender R., to Aksaghiz, crossing Tugh-sai.
—	(11,190')	Pass Gendum.
8	CAMP	.. Near Kizil-chap. Pass Kalam-Oghil.
—	(12,410')	
9	TASH BULAK	.. Over Kizil-Yar-Dawan, 12,950'
—	(10,570')	
10	ACHANG (TOGRAK-ULANG).	Cultivation. Cross Ak-Bagha R.
—	(8,800')	
11	MOLCHA ..	.. Gold pits. Cross Chizghanik-sai, Maudalik-sai, Kumbayan Chap, Molcha R.
—	(7,040')	
12	KAPA	.. Gold pits. Over many streams.
—	(7,560')	
13	DALAI KUGHAN	.. Cross Mit R.
—	(10,100')	
14	SALKAUJI	.. Pass Konche-Bulak, where cultivation, Cross Kara-Muran R. From here
—	(9,486')	the short route goes N. [whilst Route XII (2) goes N.-E. to Cherchen R.]
15	CAMP	
—	(5,800')	
16	CHERCHEN	
—		



## ROUTE NO. XII (2) (Alternative).

FROM SALKAUJI TO CHERCHEN.

? miles.

5 stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese  
Turkestan and Kansu.

*Epitome.*—No specific data.

No. of stage and total distance.		Details.
1	GUDACHE (9,300')	.. Pass Achchan village. Cultivation.
2	AK-YAR (9,260')	.. Cultivation.
3	BASH KICHIK (3,770')	.. On left bank of Cherchen River.
4	KARAKUM (3,770')	.. Along river.
5	CHERCHEN	
..		

## ROUTE NO. XII (3) (Alternative.)

FROM CHERCHEN TO VASH-SHAHRI-BAZAR.

? miles.

11 stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese  
Turkestan and Kansu.

*Epitome.*—No specific data.

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ROUTE NO. XII (3)—*contd.*

No. of stage and total distance.	Details.
1 MUNA-BULAK-SAI.. ———— (4,820')	Along E. bank of river to opposite Kara-Kum, then S. E. Cross Jigda-
Akin.	
2 KADALIK ———— (5,622')	.. Coal field.
NOTE.— <i>From here a route leads S.-W. to Dalai-Kurghan (Route XII-1 stage 13)-Crossing the Cherchen R. at Bash Kichik.</i>	
3 CAMP ———— (5,370')	.. Cross several streams.
4 CAMP ———— (5,370')	.. Cross several streams.
5 CHONG-JANGAL SAI	
6 KIZILLIK-DONG ———— (5,558')	
7 TUNUS-CHAP ———— (4,560')	.. Cross several streams.
8 KIZIL KUM ———— (5,128')	
9 CAMP ———— (4,600')	
10 TAR-AGHZI ———— (3,670')	.. On Vash-Shahri R.
11 VASH-SHAHRI	



**ROUTE NO. XII (4).**

FROM LASHIKAR SATMA TO CHARGHLIK

? miles.

? stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese Turkestan and Kansu.*Epitome.*—(See Route XII, Pt. 4, Stage 25.)No. of stage  
and total  
distance.

Details.

No details.

**ROUTE NO. XII (5).**

FROM CHIGELIK (ROUTE XIV P.) TO ABDAL.

? miles

1 stage.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese Turkestan and Kansu.*Epitome.*—Direction E., across flat country.No. of stage  
and total  
distance.

Details.

No details.

**ROUTE NO. XII (6).**FROM CHARGHALIK TO ABDAL *via* TAITMA-KOL.

? miles.

3 stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese Turkestan and Kansu.*Epitome.*—Track goes N. E. to Tarim R. which it follows, along the S. bank, to Abdal, at the W. edge of Lop Nor Lake.No. of stage  
and total  
distance.

Details.

No details.

NOTE —For Route XII (7) see note after stage 31 of Route XII Sec. 4 (page 74).

M 2



## ROUTE NO. XII (8).

FROM DONGKLIK TO TUN-HUANG HSIEN.

? miles.

17 stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese Turkestan and Kansu.

*Epitome.*—No specific data. Intermediate camps can be found in many places.

No. of stage and total distance.	Details.
1 KHUNUGU — (5,870')	
.. 2 BASHKURGHAN — (8,670')	
.. 3 CAMP — (9530')	
.. 4 KOSHBULAK — (10,360')	
.. 5 JAN-BULAK — (9,625')	
.. 6 CAMP — (9,680')	
.. 7 TASHKOI — (8,500')	.. Cross Tash Dawan 11,340'.
.. 8 KOJESH KUKUR — (7,790')	
.. 9 YULGHUN-BULAK — (7,790')	
..	



ROUTE NO. XII (8)—*contd.*

10	AK-TAGH-BULAK	
—	(TASH-BULAK)	
..	8,070'	
11	NAWACHANG	.. Pass Kunchekho.
—	(10,330')	
12	KHANAMABAI	.. Pass Khanambai-Dawan,
—	(9,300')	11,330', to shrine at
..		Khanambai on Khan-
		ambai river.
13	MUZ-BULAK	.. Cross Doboka Dawan.
—	(10,560')	
14	KASHLASTAI	..
—	(8,099')	
15	SU-MU-T'OU	.. Cultivation. Cross Doboku
—	(4,690')	river to Su-mu-t'ou,
		on Su-mu-t'ou river.
16	NANHU	.. Cultivation.
—	(4,110')	
17	TUN HUANG	.. 36 m. Route turns to W.
—	(3,730')	of Tang ho R.

## ROUTE NO. XIII.

FROM KASHGAR TO MARAL BASHI *via* FAIZABAD.

146 miles.

10 stages.

*Authority.*—Captain Shuttleworth, 1909; Major G. Pereira, 1911; Colonel P. T. Etherton, 1920; Fitzmaurice, 1921; Brig.-General R. Pigot, 1923; H. I. Hardinge, 1924.

*Epitome.*—Main Kashgar-Peking road. A cart road all the way though the traffic is chiefly by donkeys. Distances may differ by miles owing to flood, at different seasons and in different years at the same season.



ROUTE NO. XIII—*contd.*

*Telegraph Line.*—Many of the insulators are broken and missing. This seems to matter little. Poles invariably of poplar in good condition throughout.

*Aeroplane Landing Grounds.*—Available everywhere.

*Tanks.*—An easy tank route throughout. The country generally along the route is excellent for tanks, though swampy ground in some parts would have to be carefully watched for.

*Bridges.*—There are occasional bridges—a cart carrying close on 1 ton of material for the Kashgar Wireless Station accomplished the journey Urumchi-Kashgar without going through a single bridge, but carts carrying as little as 12 cwt. on several occasions broke through.

*Camping Grounds.*—Everywhere for as large a force as could use the road at one time. Billeting in villages should be avoided *always*, though, for native villages, the houses are clean; there is much smallpox and venereal is *very* prevalent throughout the whole country.

*Fodder.*—Available everywhere in small quantities proportionate to the size of the village. A force of any size could not rely on each stage for its requirements.

No. of stage  
and total  
distance.

Details.

---

1	YANDAMA	.. 12 m.	After leaving Yangi Shahr (the new city of Kashgar), the road runs due E., is sandy and the country is liable to flood in the summer months, when a guide is often necessary to avoid delay in finding the right track. At that time of year difficulty for wheeled transport would be experienced as the subsoil is soft. Yandama is a small village with 29 inhabited houses: bazar weekly.
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*Supplies.*—Limited.

2	KAZAN KUL	.. 13 m.	The road runs S. E. winding considerably and crossing several irrigation channels. At m. 7, a small village is traversed. Close to Yaman Yar a canal is crossed. Yaman Yar has 40 inhabited houses. Bazar on Wednesdays.
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ROUTE NO. XIII.—*contd.**Supplies.*—Limited.

## 3 FAIZABAD

.. 18 m. The road runs due  
E: from Yaman Yar  
to Faizabad, the first

43 m.

5 m. over a salt plain, after which a branch of the Yaman Yar river is crossed by a strong wooden bridge. The country then becomes fertile and well cultivated. There is a small village, Shaptali, 30 houses with a bazaar on Tuesdays, 12 m. E. of Yaman Yar. Supplies limited. Faizabad is an extensive village of 500 houses (?) and a Thursday bazar. It is the headquarters of a district in charge of a *Hsien-Kuan*.

*Water.*—Good, brought by the canals from the Kizil Su, 7 m. N. of Faizabad.

*Supplies.*—Of all kinds plentiful, as country for a radius of 8 m. is well cultivated and fertile.

## 4 YANGI ABAD

.. 13 m. The road runs due E.  
through cultivated  
land, crossing many

56 m.

irrigation channels, some by bridges and some by fords. Yangi Abad is a small village of 180 houses with a weekly bazaar.

*Water.*—Good, from irrigation channels.

*Supplies.*—Limited.

## 5 LUNG KOR

.. 16 m. The road enters the  
Shamal Kum desert  
1½ m. E. of Yangi Abad

72 m.

and runs due E., not N. E. as shewn on the map. The Shamal Kum is devoid of all vegetation between Yangi Abad and 1 m. W. of Lung Kor, where there is low tamarisk jungle. Lung Kor is only a rest house with a few mud houses round it and a baker's shop. It is situated on the right bank of the Kizil Su, or Kashgar river, which is 50 yds. broad and the current strong. Its greatest depth in the cold weather is 4'.

*Fuel.*—Plentiful.*Water.*—Good.*Supplies.*—Nil, except a few flocks of sheep.

## 6 CHANGDZE

.. 13 m. (11 m. ?) This road crosses  
the Kizil Su or Kashgar  
river, by a double

85 m.

cantilever bridge on leaving Lung Kor. It runs 7 m. to the small hamlet of Kara Yulgun and thence due E. to Chongza.



ROUTE NO. XIII—*contd.*

Kara Yulgun has a Chinese rest house, shops, and 7 other houses. There is another double cantilever bridge over a canal at Kara Yulgun. Both these bridges are strong enough to carry wheeled artillery. They are liable to be swept by hot weather floods. The country between Lung Kor, Chongza, and beyond is subject to floods. 3 m. N. E. of Lung Kor the jungle belt is reached. *These jungles consist of tigrak, a sort of poplar, and are very extensive and are known as the Maralbashi jungles.* They extend from 3 m. E. of Lung Kor to Chadir Kul 45 m. N. E. of Maralbashi. Owing to the proximity of water they are infested with mosquitoes, horse and gad-flies during the hot weather months, and travelling by day is sometimes unpleasant. The natives say that they have seen horses fall exhausted, pouring with blood, after having been attacked by countless numbers of flies. Kara Yulung is a small hamlet with a Chinese rest house; supplies *nil*. Yassulak, the old stage, a small hamlet of 6 huts on the left bank of the Kizil Su and  $\frac{1}{2}$  m. N. of it no longer exists and the halting place is now Changdze, a hamlet of 4 inns.

*Water.*—Good.

*Supplies.*—Nil, except a few sheep.

*Fuel.*—Plentiful.

7 URDIKLIK .. 14 m. The road runs E.  
 ——— (16 m. ? FROM CHANGDZE). through country covered with jungle and low marshy land alternately. As the country is quite flat the inundations and marshy ground can be avoided. The road is difficult to follow because it is altered according to the amount of water over the country at the time and it is easy to follow a track that may lead to an inundation, which may have been dry land a few days previously. A guide should therefore be taken. The jungle has been considerably thinned in the neighbourhood of the road during the last 15 years (1924). Urdiklik is on the N. edge of a large, reedy lake which is a backwater of the Kizil Su, or Kashgar river as it is called to the E. Urdiklik is infested with mosquitoes and is a village with 85 houses, three *serais* and a Chinese rest house. *From Urdiklik R. XLV. runs S. and joins the Maral Bashi-Yarkand route (Route XIV).*

*Water.*—Good.

*Fuel.*—Plentiful.

*Supplies.*—Limited.



ROUTE NO. XIII.—*contd.*

8 KARA KULCHUN .. 18 m. The road runs due E. through jungle. The soil is soft and the road becomes easily cut up and the dust is very great. 15 m. E. of Urdiklik is Dungan Mazar, a small hamlet, where water brackish. Supplies *nil*. Round the village of Kara Kulchun the jungle has been cleared, and rice and wheat are grown.

Water.—Good.

Fuel.—Plentiful.

Supplies.—Limited.

9 SHUGA .. 14 m. The road runs through dense *tugrak* jungle. It is very dusty and the soft loess is a foot deep in places. The Kizil Su, which is here 5' deep and 30 yds. wide, is re-crossed at Shuga by a wooden bridge strong enough to bear wheeled artillery. The bridge is not washed away yearly as the river is not liable to floods, the banks being high. The village is situated on its right or S. bank. The old course of the river was 12 m. S. of the village. The new course leaves the old course  $\frac{1}{2}$  m. S. E. of Kara Kulchun and flows N. E. to Shuga and then due E., flowing just N. of Maral Bashi. The old course is marshy and full of reeds. The river is here sluggish and quite clear.

Shuga is a small village with a rest house.

Water.—Good.

Fuel.—Plentiful.

Supplies.—Limited.

10 MARAL BASHI .. 15 m. The road runs E. and the jungles are left 2 m. E. of Shuga. A flat country is then entered which is marshy and in which there are many large sheets of reedy water. There is much tamarisk scrub. After 6 m. the country is reclaimed and cultivated in places. Maral Bashi is a small town of 600 houses and a Thursday bazar with a Chinese fort, inside of which is the Yamen, school and official buildings. It is the headquarters of a district under a *Hsien Kuan* (district magistrate). The garrison consists of 115 infantry and 50 cavalry.

Water.—From the Kizil Su, brackish owing to its having passed through saline lakes E. of Shuga. Most of the water is now brought from the Yarkand river by canal.



ROUTE NO. XIII.—*contd.*

*Supplies.*—Of all kinds plentiful. Weekly bazar on Thursdays.

## ROUTE NO. XIV.

FROM LEH TO HAMI AND KANSU PROVINCE  
(\*SUCHOW AND AN-SHI).

In six sections as under :—

	Miles.	Stages.
See 1. From Leh to Yarkand <i>via</i> Sasser, Kara Koram and Sanju Passes .. ..	453	27
„ 2. From Yarkand to Aksu, <i>via</i> Maral Bashi .. ..	284	15
„ 3. From Aksu to Toksun, <i>via</i> Kuchar and Karashar	588	28
„ 4. Toksun to Urumchi, <i>via</i> Ta-Pa-Cheng .. ..	118 $\frac{3}{4}$	6
„ 5. From Urumchi to Kucheng, <i>via</i> Ch'i-ko-Chingtzu ..	123	7
„ 6. From Kucheng to Hami	261	15
Total	1,827 $\frac{3}{4}$	98

\*NOTE—Differentiate between Suchow and Sachow, the latter being another name for Tang-Huang-Hsien.

## Section NO. 1.

FROM LEH TO YARKAND *via* SASSER, KARA  
KORAM AND SANJU PASSES.

See Survey of India Map 51 S. E. and Routes 88 and  
90 of Routes in W. Himalya, Kashmir, etc., Vol. I.

453 miles.

27 stages.

*Authority.*—Lieut.-Colonel Broke-Smith, 1922; Maps  
of Sir A. Stein's explorations in Chinese  
Turkestan, 1900—1905; Brig.-General  
R. Pigot, June-July, 1923.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

*Epitome.*—This is the trade route which is most used by caravans travelling to Chinese Turkistan.

It is open during the summer months (end of June till October) and is used occasionally during the winter as well, at both seasons by pack transport. *In winter route No. 11 is invariably used from Leh to Murgo, since the Sasser pass is then difficult and the Shyok river is easy.*

Bactrian camels can be used between the Sanju and Sasser passes and between Sanju pass and Yarkand, but not over the Sanju pass. Carts can be used between Sanju Bazaar and Guma Bazaar and Yarkand.

The track is rough and uncared for except in a few places but could be made into a good mule track with the possible exception of the Sasser pass.

A road to take wheels could be made with no engineering difficulty from Depsang plains to the top of the Suget pass. (N. B. Suget is pronounced with G hard).

Though the route up the Shyok [Route 11] is undoubtedly better, it is closed by flood at the most popular time of the year, and the Chang-la (Pass) is not always easy.

(*Later Note.*—Since 1916 this route has fallen into disrepair for reasons given in Epitome to Route I. See also Routes in the W. Himalaya and Kashmir, Volume I, Routes 88, 89 and 90).

Camel caravans use the Kugiar Route (13) from Aktagh to Yarkand in the spring and autumn, but it is impracticable for ponies for most of the summer months. The summer routes are the Sanju (this Route XIV) and the Kilian Route (14) which opens later than the Sanju (Route XIV) but is used in preference when available. The routes *via* Chang-Chenmo and Lingzi-Thang plains (mentioned at the end of Route 14) have fallen into disuse for very many years, lack of water being the great difficulty: but see Routes 91, 92 and 93 of Routes in the W. Himalaya, Kashmir, etc., Vol I.

The mortality on this route amongst ponies is large owing to the following reasons:—

	% of mortality.
(a) Bad condition at commencement of journey ..	40
(b) Lack of grazing <i>en route</i> .. ..	30
(c) Too heavy loads (200 lbs.) .. ..	25
(d) Altitude .. ..	5
	N2



ROUTE NO. XIV.—SECTION 1.—*contd.*

*Principal obstacles.*—Kardong pass is passible for ponies from the end of July (could be made practicable from the beginning of July), before that yaks are necessary.

Sasser pass is a long and difficult pass owing to glaciers (but could be greatly improved). These are the only glaciers on the route.

Suget and Karakoram passes are easy except for their altitude.

Sanju pass is often very difficult owing to ice: but on it animals have not to work long at a high altitude. Yaks are generally used.

Other obstacles are the fords on the Shyok at Sasser, the Karakash river and several side streams, when in spate, or full of snow water, and the Rung *nullah* leading up from the Shyok at Sasser.

The cart road Karghalik to Yarkand is a *kuccha* road, i.e., unmade. Where it does not cross gravel desert it is either sand or in very light soil. The road varies from 10 to 20 yds. in width. The average daily wheeled traffic is about 4 or 5 pairs of wheels either way. There is a lot of pack and foot traffic and the country carts have 5' wheels on 8' track: so there is little chance of ruts forming. With very little wear it would cut up badly and probably prove bottomless. It is doubtful if a division with its artillery and transport on wheels could use it unless brushwood or wire netting or something similar were used.

From Sanju Bazaar on, the country is quite feasible for horsed field artillery.

The oases are thickly planted with trees and are quite blind from a military point of view when the leaves are on.

*N. B.*—These remarks may be taken to apply to the whole road Kashgar—Khotan. (Route XII, Parts 1, 2 & 3.)

*Aeroplane landing grounds.*—

(a) Leh. Few days work required.

(b) Dapsang Plains.

(c) Sanju. Few days work required.

(d) North of Sanju. Anywhere in Takhla Makan Desert.

*Tanks.*—This route is impossible in its present state for tanks throughout, but very little work on the impassible sections of the route would make it practicable.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

*Camping ground.*—As far as Kivaz, e.g.s., for anything but a small party are on stony bad ground as a rule. Compact camps could rarely be made. On the other hand, at every stage scattered pieces of usually stony ground can be found to accommodate a brigade. Beyond Kivaz there is ample room in the fields.

*Water.*—Plentiful. But beyond Sanju it is sometimes hard to get anything but muddy irrigation water unfit to drink.

*Fuel.*—Burtsa, sant or dung scarce—as a rule only sufficient for a few men.

*Fodder.*—Grazing is *very* scarce for even a limited number of animals from stages 5—12 inclusive. For any military expedition the grazing on this route must be made a matter of the greatest importance. If the grazing is to be in any way relied on, a very complete reconnaissance is necessary in advance.

*Supplies.*—None can be obtained between Panimir and Sanju.

No. of stage  
and total  
distance.

Details.

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1	SUMBOG	.. 10 m. (4 hrs.). Good track, steady ascent, grass.
---	--------	---

---

10 m.

*Camping ground.*—Scattered spaces for a camp.

*Water.*—Plentiful.

*Fodder.*—Grazing.

*Fuel.*—Nil.

*Supplies.*—Nil.

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2	KARDONG	.. 16 m. (8½ hrs). Steep ascent for 2 hrs. to top of pass. Snow till
---	---------	--

---

26 m

end of July and yaks must be used, till about 3rd week in that month. Height 17,400'. Steep descent, dangerous from avalanches early in the year, for 1,500' then more gradual, down rocky then grassy valley. 3 hrs. down open grass, and ample space for camp.

Follow down left bank of valley to Kardong village 20 or 30 furlongs in scattered hamlets with a *serai*—a shady enclosure.

*Camping ground.*—Ample fields.

*Water.*—Plentiful.



ROUTE NO. XIV.—SECTION No. 1.—*contd.**Fuel.*—Obtainable.*Fodder.*—Some grazing.*Supplies.*—Scanty.

---

3 TIRIT.. 16 m. (6½ hrs.). Track leads  
down to bed of Kar-  
dong river, steep des-cent in places, in 2½ hrs. Thick scrub jungle in the bed. Then  
42 m. the track crosses and recrosses the stream by two 20' bridges  
fit for pack transport. At 3 hrs. stream joins Shyok river and  
the track continues down the left bank of the Shyok sometimes  
on the sandy river bed and sometimes built up on the rocky  
bank. At 4½ hrs. Karchar village a little way up the *nullah*.  
There are grazing, water, fuel, and scanty supplies here.Three m. on, cross Shyok river by a suspension bridge, 80  
yds. long, fit for pack transport. A stock of material for repair  
is kept at the chowkidar's hut on the right bank.The river here is kept to its present channel under the sus-  
pension bridge by a directing bund ½ m. up stream; apparently  
it would be easy to divert it to a different channel.

Three m. from the bridge to Tirit a shady village.

*Camping ground.*—Ample in fields.*Water.*—Plentiful.*Fodder.*—Grazing.*Fuel.*—Brushwood.*Supplies.*—Some available.

*Route XIV (1). When the Kardong pass is closed by snow, communication between Leh and the Nubra valley is by way of the Diger La, which is at the head of the nullah running into the Indus (river bank) E. of Leh. There is said to be much less snow on it, but the road is rougher and 25 m. longer and when the Shyok is in flood this way is impassible. Marches are said to be Leh to camp, 11 m., to Diger 25 m., to Karchar (see stage 3 above) 25 m.*

MAIN ROUTE NO. XIV.—SECTION No. 1.—*contd.*

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4 PANIMIR.. 20 m. (8½ hrs.) Path leads through  
lanes with high  
thorn fences bet-62 m. between fields and over sand down right bank of Shyok, up left  
bank of Nubra river, passing Laikhun village, a group of vil-



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

lages of which Tegar is the chief and then Chamsing. At 15 m. ascend on a *parri* on a good track.

Then on sand to Panimir hot springs,  $\frac{3}{4}$  m. short of Panimir *serai*.

The beds of the Tirit-Nubra streams contain a lot of brushwood. Panimir is a large straggling village.

*Camping ground*.—Ample in the fields.

*Water*.—Plentiful.

*Fuel*.—Plentiful.

*Fodder*.—Grazing and bhoosa.

*Supplies*.—Obtainable. Caravans going to Yarkand take 15 days' supplies from here and Kashmir Government keep up a granary.

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5 UMLUNG .. 15 m. ( $7\frac{1}{2}$  hrs.). Up left bank of Nubra  
 11 $\frac{1}{2}$  hrs. through cultivation (this is the

77 m. last village before the Sanju river). Then 3 hrs. more to Thalam Buti *nullah*. There is now no village or cultivation at the mouth of this *nullah*. Cross to right bank of stream by a bridge (in need of repair in July 1922) stream probably unfordable.

Then a well-made track zig-zags up right bank of *nullah* about 1,000' and then down 500' (about) to the stream at Umlung. (There is only room for a very small party to camp here; anything bigger would have to go up  $2\frac{1}{2}$  hrs. further on where there is difficulty about getting animals down to water, but ample space. The other conditions are as at Umlung).

*Camping ground*.—See above.

*Water*.—Plentiful, but sometimes muddy.

*Fuel*.—A little scrub and dung.

*Fodder*.—Nil.

*Supplies*.—Nil.

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6 TUTIYALIK .. 14 m. ( $7\frac{1}{2}$  hrs.). Up right bank of  
 a constricted valley.

91 m. At  $2\frac{1}{2}$  hrs. the 19th century track can just be seen on the hillside. At 3 hrs. cross to left bank by bridge 15'  $\times$  6' broad, would take loaded mules passed singly; supported on 4 poplar beams 1' diameter, requires side rails to be serviceable. At 5 hrs. pass Pang Tangsa opposite Murgisthang glacier. There is a little grazing here



ROUTE NO. XIV.—SECTION NO. 1.—*contd.*

and room for a camp but no fuel. The valley opens out after the bridge and the stream is usually fordable above Murgisthang glacier. At 7 hrs. reach Tutiyaik, grassy slopes extending both sides of a *nullah* and for  $1\frac{1}{2}$  m. above its junction.

*Camping ground.*—Ample.

*Water.*—Plentiful.

*Fuel.*—Nil.

*Fodder.*—Grazing.

*Supplies.*—Nil.

*N. B.*—The place names in Indian Atlas, quarter sheet 54, N. E., of 1875 are wrongly placed on this stage.

7 SASSER ..14 m. ( $7\frac{1}{2}$  hrs). Track goes up left bank of stream, easy ascent for  $1\frac{1}{2}$  hrs., 105 m. passing two glaciers in side *nullahs*; then leaves stream and zig-zags up a rough rocky path for about 350', then over the lips of two glaciers blocking the valley, one from the right and one from the left bank; then down and up another glacier from left bank to  $3\frac{1}{2}$  hrs. The track is very rough and rocky. Then on snow (July) for  $1\frac{1}{2}$  hrs. to top of Sasser glacier and pass, 17,500'. Then along a rough track down left bank of Sasser valley passing a little grazing at  $6\frac{1}{2}$  hrs.

Sasser *serai* is near the mouth of the *nullah* where it runs into the Shyok.

*Camping ground.*—Ample though stony ground in Shyok bed below the *serai*. No room at *serai*.

*Water.*—Plentiful and if muddy in Sasser and Shyok rivers there is a good spring 1 m. below on right bank of Shyok.

*Fuel.*—A little *burtsa*.

*Fodder.*—Very scanty grazing.

*Supplies.*—Nil.

8 MURGO ..12 m. ( $4\frac{1}{2}$  hrs). From left bank of Shyok river ford Shyok river. In July 1922 the ford was one m. below junction of Sasser river.

River is said to be at its lowest from 7 to 10 a.m. and to be impassible by ponies in the afternoon in flood time. Camels can nearly always cross here.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

*Water.*—3' deep and stream very strong. Two men live at Sasser *serai* who are paid by the Kashmir Government as guides to point out the ford.

Then up the left bank on stony river bed, fording numerous side channels 1 m. to Roong *nullah* which is a narrow gorge with precipitous sides. Track leads up this *nullah* crossing stream every few yards for an hour. This is sometimes impassible in the afternoon.

The track then turns up a side *nullah* on the left bank (very narrow *nullah* but *alternative route leads up to the top of the left bank*) for  $\frac{1}{4}$  hr. when the *nullah* opens out and the track leads over a small pass to Chang Tash lake bed. (Ample room for camp here with water, burtsa and some grazing).

The path runs along the S. of lake bed for  $1\frac{1}{4}$  hr., good going then down an open *nullah* to the junction of the Murbu and Changtash valleys. There is a ruined *serai* here. *There is said to be some poisoned grass between Changtash and Bulak-i-Murgo, particularly in the latter place.*

*Camping ground.*—Ample.

*Water.*—Plentiful.

*Fuel.*—Burtsa and dung.

*Fodder.*—Grazing.

*Supplies.*—Nil.

9 KIZILYAT ..19 m. ( $8\frac{1}{2}$  hrs.) Half an hr. to Bulak-i-

136 m.

Murgo (spring), good camping ground. (*Route 11 comes in here*). At  $1\frac{1}{2}$  hr. descend to river bed, former path carried away. 500 yds. along the river bed ford the stream, which might be a bad obstacle if the river is high. Then a new path ascends on right bank. A good track which leads past Murgo gorge. (The old path is visible on left bank). At  $2\frac{1}{2}$  hrs. cross to left bank and 40 minutes later recross to right. At  $3\frac{1}{2}$  hrs. descend to river bed, pebbly but not bad going, in some places  $\frac{1}{4}$  m. wide with the stream in several channels and no obstacles; at  $4\frac{1}{2}$  hrs. the path ascends on right bank again to pass a land slip and then continue up river bed till  $8\frac{1}{2}$  hrs. when Kizilyat c.g. is reached.

*Camping ground.*—Room for a brigade on scattered pieces of stony but flat ground.

*Water.*—Plentiful.

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ROUTE NO. XIV.—SECTION No. 1.—*contd.**Fuel.*—Scanty burtsa.*Fodder.*—Nil.*Supplies.*—Nil.

10 CHAJOSH JILGA. .24 m. (10 $\frac{3}{4}$  hrs.). Up the valley for 40 minutes then take the N. bank of the

160 m. river. Good going up stream bed, but probably difficult when water is high. In 1 hr. 35 minutes path enters a gorge 400 yds. long, by about 10 yds. to 20 yds. wide. *Alternative track on right bank.* Then it crosses a shoulder on the left bank and continues up a narrow side *nullah*, 5 yds. wide in one place, leading N. which gradually opens out and leads to the Depsang plain at 3 $\frac{1}{2}$  hrs. This is open rolling down country, gravel and good going; and there is said to be some grazing here later in the year. For 6 $\frac{1}{2}$  hrs. reach an open valley leading down to the plain through which the Chipchak river (called by Yarkandis Woojuk) runs. The river bed nearly  $\frac{1}{2}$  m. broad is reached in 8 $\frac{1}{2}$  hrs. and is said to be an obstacle when the river is high but the bottom is shale, gravel, and some mud. In July three streams 10 yds. wide, by 2 ft. deep, numerous small channels. Dolata Begulda is a c. g. on the right bank, a little grazing, ample room.  $\frac{1}{2}$  hr. later cross a dry lake bed,  $\frac{1}{2}$  m. across with some small streams running through it.

(N. B.— $\frac{1}{4}$  sheet 44 A., S. E. of the 73 Survey of India bears only a faint resemblance to the country N. of the Chipchak.)

Then up a broad shingly valley past 3 old huts at Palo (old Chinese boundary guard) to the Chajosh Jilga.

*Camping ground.*—Scattered and stony.*Water.*—Plentiful.*Fuel.*—Nil.*Fodder.*—Nil.*Supplies.*—Nil.

11 BALTI BRANSA .. 17 m. (8 $\frac{1}{2}$  hrs.). Up open stony valley for 1 $\frac{1}{2}$  hrs. then on to left bank where

177 m. it is quite fair going, a gentle rise until 3 hrs. when incline increases, at 3 $\frac{1}{2}$  hrs. turn up side *nullah* 4 $\frac{1}{2}$  hrs. to Kara Koram pass, no steep ascent on S. side. The pass is said to be practically clear of snow in May (blown away by the wind), no glacier near and only difficulty is the altitude (18,317'), which makes the pace very slow.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

Descent on N. side a little steeper for first few hundred feet then a gentle incline down a broad valley, leading to a stony gorge 200 yds. long and 20 yds. to 50 yds. wide at the mouth of which is Balti Bransa. *A track could be made on the right bank to pass this gorge.*

*Camping ground.*—Ample, is in a plain  $2\frac{1}{2}$  m. by 2 m. surrounded by low hills.

*Water.*—Plentiful.

*Fuel.*—Scanty burtsa.

*Fodder.*—Scanty grazing.

*Supplies.*—Nil.

12 KOOM BULAK ..20 m. (9 hrs.). Follow the Wap Jilga through a succession of open flats. Good

197 m. going. The stream has a gravel bed and there is no difficulty in fording it. In 2 hrs. pass Kizil Tagh, a better place to camp than Balti Bransa, with more grazing—burtsa. At  $3\frac{1}{2}$  hrs. the river: crossing is soft off the track, probably boggy when well thawed out.

At  $8\frac{1}{2}$  hrs. c. g. ample: on right bank of stream and another in some sand-hills to the E.  $\frac{1}{2}$  hr. further on.

*Water.*—Plentiful at the first named camp.

*Fuel.*—Burtsa.

*Fodder.*—Some grazing.

*Supplies.*—Nil.

13 CHIBRA ..15 m. ( $7\frac{1}{2}$  hrs.). Path goes N. across sand hills from

212 m.  $1\frac{1}{4}$  hrs. (at 1 hr. the Kugiar Route 13). Then on the level gravel bank of Karakoram stream, pass Malishah at  $1\frac{1}{2}$  hrs. (which is a spring in the stream bed which gives its name to the surrounding country). At 2 hrs. cross stream from the E. close to some gravel mounds,  $\frac{1}{4}$  m. above its junction with the Karakoram stream to form the Zarsaishan or Yarkand river. There is a c. g. at the junction, but no grazing in July. 400 yds. on cross a spur of Aktagh. Then along a gentle winding ascent on right bank of dry shingly river bed 500 yds. broad, low hills on left bank. Aktagh on right bank. The valley gradually closes in.

Chibra is at junction of a valley from the E.

*Camping ground.*—Ample spaces.



ROUTE NO. XIV.—SECTION NO. 1.—*contd.*

*Water.*—Plentiful.

*Fuel, Fodder, Supplies.*—Nil.

14 SUGET .. 24 m. (11½ hrs.). Up the valley an easy slope to Suget pass (17,610'). 8 m. 236 m. no glacier, practically no snow. Steep descent on N. side for a few hundred feet, after this the slope becomes gentle but the track is rough in places. At 5½ hrs. reach Kotaz where a side *nullah* comes in and there is grazing and burtsa and ample though stony ground for camp. Follow the valley down, track sometimes on the rough and stony bed and sometimes on right bank, at 9½ hrs. the valley closes in for 1 hr., the gorge being 150 to 200 yds. wide, left bank precipitous rock, right conglomerate on which a track could be made. Valley then opens out to 400 yds. to 500 yds. wide and track follows down, partly boulders and partly scrub and pass to camp.

*Water.*—Plentiful.

*Fuel.*—Scrub.

*Fodder.*—Good grazing.

*Supplies.*—Sheep from Kirghiz.

15 OLBOK .. 9 m. (4½ hrs.). 2 m. down the *nullah* to Suget Karaul which is a large square (estimate 50 yds. square) enclosure, walls 9' thick at foot of rubble (pebbles stones and boulders embedded in mud) 12' high with battlemented top of mud. Two ramps inside lead to the battlements.

(*Note.*—A mountain howitzer would shake these walls down quickly). There are huts built round the inside. Population said to be 15 of both sexes. No village, no cultivation. *A Chine e Ssu Yen is sometimes stationed here, at other times a Mohamedan clerk who looks at passports and takes names.*

Supplies can be obtained here on previous notice being given but nothing except sheep without notice. The Karaul stands in a bare open stony plain on the banks of the Karakash river and the Suget valley offers a better camp: when the Ssu Yen is present, there is said to be a small guard of Chinese soldiers with him.

Track leads down left bank of Karakash river, valley about ¼ m. wide, precipitous mountains on both sides. At 2 hrs.



ROUTE No. XIV.—SECTION No. 1.—*contd.*

from Karaul (5 m.) ford the river which runs in several channels. Main channel 30 yds. wide, 2'6" deep, heavy water. Said to be impassible when river is in flood.

Track now keeps on right bank passing opposite Shahidulla valley with the ruins of a village at its mouth and a shrine. Shahidulla is completely abandoned. No inhabitants or cultivation now. Some Kirghiz live up the valley. At 2 hrs. from Karaul recross to left bank and  $\frac{1}{2}$  hr. more to c. g. ample though scattered brushwood and pasture flats by river.

*Water.*—Plentiful.

*Fuel.*—Brushwood.

*Fodder.*—Grazing.

*Supplies.*—Sheep and cattle from Kirghiz in neighbouring nullahs.

16 PILA-TA-KASH .. 16 m. ( $6\frac{1}{2}$  hrs.). Track leads along left bank of Karakash

261 m.

$1\frac{1}{2}$  hrs. Past first Khadiwas

Jilga  $2\frac{3}{4}$  hrs. then Grunj Karlik, where there is a c. g., grass and scrub; then along a narrow rocky path to  $3\frac{1}{2}$  hrs. where there is a small patch of cultivation (first since the Nubra valley,  $\frac{1}{2}$  acre of barley—one rubble hut. Former cultivation in Karakash valley has been practically all abandoned. People are said to have died out, 8 families dying in 1922 according to local reports. There is also evidence that the water level has gone down). Then the Tughrasu valley. This river is a serious obstacle and when in flood cannot be crossed by ponies. Ford in use July 1922 at junction with Karakash, and 1 m. up stream, both thigh deep with bad bouldery bottoms, the stream is rapid and at the lower ford there is a chance of animals being swept off the bar into the main river which is narrow and deep here.

In 4 hrs. reach Tughra where there lives a grain merchant with a small stock of flour, rice, and barley, a Chinese Government arrangement. 5 hrs. Kilian Kurghan, where are remains of a rubble fort and some huts and a good c. g., but scanty grazing, fuel and scrub. Cross Kilian river (*up which lies route No. 14*). No obstacle, at  $5\frac{3}{4}$  hrs. a rocky corner is passed.  $6\frac{1}{2}$  hrs. Pila-Ta-Gash stream, an obstacle when in spate, and there are extensive c. gs. on the abandoned fields, one family of goat herds now lives here.

*Water.*—Plentiful.



ROUTE NO. XIV.—SECTION No. 1.—*contd.**Fuel.*—Scant.*Fodder.*—Grazing.*Supplies.*—Sheep and cattle from Kirghiz.

## 17 KARGUJ

..18 m. (9½ hrs.). Track follows  
left bank of Karakash  
river at 1½ hrs. passing

279 m.  
opposite (2nd) Khadiwas Jilga which holds a number of Kirghiz with camels, yaks, etc. At 2 hrs. there is a bad rocky corner where the track runs along a narrow causeway of rock in about 18" of water (to 3 hrs.); with the main channel of the river beyond. Loads have to be manhandled here as the causeway is too narrow for animals to get round with loads on in (July). At 3½ hrs. Mazar Abu Bakar group of graves and Alina-zar Kurghan ruins of a fort and abandoned cultivation and some old cave dwellings. There is a good c. g. here, and grazing scrub and fuel.

*Route XIV B.*—There is said to be a winter path down unexplored gorge of Karakash by which a man can reach Khotan over the ice (?) in 5 days from Ali Nazar, but it is most improbable as both Deasy and Stein have tried and failed.

There are often hot springs on these rivers which keep water clear of ice.

MAIN ROUTE—*contd.*

Track turns up Ali Nazar valley, general direction N., a stony track up narrow *nullah* crossing stream many times, difficult and slippery when frozen.

At 4½ hrs. take E. hand of *nullah*, at 5½ hrs. there is a gorge and waterfall, the path zig-zags up left bank. This is called the "Kitchik Karakoram" by the caravan men (the little Karakoram). Height 12,050'. Room to camp above the gorge on bad stony ground 6¼ hrs. (a place for a very small party just below the gorge).

Scanty grazing, scanty fuel (scrub). At 7½ hrs. take N. E. bank of *nullah*, where there is a rubble shelter hut, also another a little further up (Tarbogaz). 9½ hrs. Kargos, no room to camp for any but a small party, really only a sheltering place under an overhanging rock, narrow stony *nullah* with precipitous sides. Little grazing, no fuel.

This is where loads are changed on to yaks for the Sanju pass.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

## 18 JANDAR

..9 m. (4 hrs.). Turn up side

*nullah* due N. steep

288 m.

but not very diffi-

cult when water is not frozen, a bad ascent where there is much ice, to the Sanju pass also called Grim pass. Muzert or Jandarart, a sharp ridge, 16,650', no glacier and very little snow in July. Then steep descent for an hour (yak's time on a warm day). Then a more gradual descent amongst grassy mounds to Kirghiz encampment at Jandar.

Ample camping ground; good grazing, fuel, dung and burtsa; supplies sheep, fowls, eggs.

## 19 AKAZ-AGHZI

..20 m. (7½ hrs.). Path des-

cends rather steeply to

308 m.

junction of Sanju and

Kichik Yallak streams in ½ hr. and follows river bank going N. W. As far as this the valley is dotted with Kirghiz tents in July.

It then narrows and at 1½ hrs. cross to left bank of Gezge (Gacha) 10,100'; scattered camping places, grazing burtsa. Kurlung Turung valley is reached in 3 hrs. a few patches of barley and signs of former cultivation along the Sanju valley below Gezge. Tamkaraul or Langartam is reached in 6 hrs.: no village here now, only one family. Just below Tam is the first fir tree since Nubra valley. Here the valley narrows to a gorge 150 yds. wide and there are the remains of an old wall (fortification) across the valley.

For 3½ hrs. to camp at the junction of Sanju and Yanghalik rivers; the stream is crossed constantly; knee deep but a bad bouldery bottom. Grazing, fuel (brushwood), no supplies. Scattered pieces of ground for camps.

*Route XIV (2).—From Akaz-Aghzi the route via Chuchu Diwan to Sanju Bazaar, which has to be used when the water is at all high, (July and August) turns off.* (One traveller reached this spot on 1st August after a spell of cloudy days when the water was low, which is very exceptional at that date, so he took the direct route, but only just made it). Marches said to be for Akaz-Aghzi up Yanghaklik Jilga across Chuchu Diwan (14,000') to camp, 4 m. beyond Kok-Bash where there is a *mazar* and some fresh water; water between this and the Diwan being brackish. From this *mazar*, Sanju Bazaar can be reached in a long day's march.



ROUTE NO. XIV.—SECTION 1.—*contd.*

## 20 KIVAZ

321 m.

..13 m. (6½ hrs.). Path follows the river due N. down narrow gorge.

(*Note.*—Form lines on Survey of India Sheet No. 51 S. E. Serial No. 9 are misleading here). Precipitous rocks on either hand (2 to 5 thousand feet high at a rough estimate). The river has to be forded 6 times in the first hour, after which the gorge opens out a little, twice in second hr., 4 times in third, 3 times in 4th hr. and once in 5th hr., 16 times in all; bottom boulders and stream swift. Depth depends on time of year. At 4½ hrs. (Kalkee) the river is in a trough and the flat banks are ¼ m. across. At 5½ hrs. the Kivaz cultivation begins (Si-watash) and from here on cultivation on one or both sides of the river is continuous. Camp at 6½ hrs., ample camel browsing, but very little pony grazing on this march.

At Kivaz the stony river bed is 400 yds. broad and the stream runs in several channels. This is the first village since Nubra valley.

*Camping ground.*—Ample in the fields.

*Fuel.*—Ample.

*Fodder.*—Grazing and *bhoosa* (harvest early August).

*Supplies.*—Plentiful.

## 21 SANJU BAZAAR

334 m.

..13 m. (5 hrs.). Path follows bank of Sanju river mostly through cultivation, often in a lane several feet below the level of the fields.

Sanju is a flourishing straggling settlement said to have 3,000 houses with a bazaar 200 yds. long.

There is a Chinese official (Ssuyen) here who examines passports, and a weekly market day.

*Camping ground.*—3 m. short of bazaar in the fields.

*Fuel.*—Plentiful.

*Fodder.*—Bhoosa.

*Supplies.*—Ample.

## 22 KOSHTAGH

359 m.

..25 m. (9 hrs.). Cross Sanju river to left bank 3 m. short of bazaar. Bed

pebbly, about 800 yds. broad, river in several channels, knee deep, no obstacle.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

Then N. W. through cultivation till 1 hr., then easy ascent into foot hills. The track is sandy and undulating through thin sparse scrub about a foot high (this is the winter browsing ground of the Sanju camels) 6 hrs. reach Sulaghiz valley, (a small village and cultivation with a pond)  $\frac{1}{2}$  hr. across. Then over foot hills as before, scrub getting scantier, 8 hrs. signs of sandunes, 9 hrs. Koshtagh on the Kilian river. Koshtagh is a flourishing village with a *serai* and is  $2\frac{1}{2}$  to 3 m. across the cultivation. There is a large bazaar (market day Monday).

*Camping ground.*—In fields.

*Fuel.*—Plentiful.

*Fodder.*—Bhoosa (harvest end of July).

*Supplies.*—Ample.

*Road from Sanju on could be made practicable for wheels.*  
(No Chinese official at Koshtagh, August 1922).

23 OI-TOGHRAK ..19 m. ( $7\frac{1}{2}$  hrs.). Cross Killian  
river bed pebbly, about  
378 m. 1 m. across. Main

stream 20 yds. across (early August) and knee deep, no obstacle. (No reeds in sight). Then across desert, scrub very scanty passing S. of ridge of gravel hills.  $3\frac{1}{4}$  hrs. descent to Pishna valley, small stream and some grass. This is the last water before Oi-Tugrak. Then across desert to  $7\frac{1}{2}$  hrs. Oi-Tugrak is a small oasis, 30 houses, no *serai*, about  $\frac{1}{2}$  m. across, a mile long, in a deepish valley.

*Camping ground.*—In desert or on scanty fields.

*Fuel.*—Plentiful.

*Fodder.*—Bhoosa.

*Supplies.*—Scanty.

24 BORA ..12 m. ( $4\frac{1}{2}$  hrs.). Track goes  
up a little open valley  
390 m. about 300'; heavy

going; at  $2\frac{1}{2}$  m. on the foot hills; again at 6 m. cross a small ridge in the desert. Then at 9 m. a gradual descent (500') to Bora valley. Bora is a prosperous village of 300 houses, a *serai*, bazaar.

*Camping ground.*—Ample in the fields.

*Fuel.*—Plentiful.

*Fodder.*—Bhoosa.

*Supplies.*—Some.

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ROUTE NO. XIV.—SECTION No. 1.—*contd.*

25 KARGHAKLIK .. 22 m. (10 hrs.). Leaving Bora

390 m. oasis path crosses stream and ascends on to the desert, gravel ridge on left bank 8 m. ; Bora stream in a valley on the right.

At 8½ m. foothills merge into the plain, the desert is quite bare here. 14 m. reach end of cultivation, then through lanes and cross stream bed to Karghaklik; many miles of matting roofed bazaar (market day Monday). There are here a Chinese Amban, British Aksakal (honorary), several Indian traders, and a Chinese garrison which varies from 30 to 300. It is now a large and flourishing town. (Mud brick).

*Camping ground.*—In the fields.

*Supplies, etc.*—Ample.

NOTE.—There is a route XIV (3) (i) A to Karghalik from Baghjigda [*vide* Route XIV (3) (i)], *via* Khusabad, Shitala and Saikichik.

26 POSGAM .. 24 m. (10 hrs.). One m. from Yamen to end of bazaar. Join main

436 m. Kashgar-Khotan road. Level but sandy, 10—20 yds. broad, planted with trees on either side nearly all the way ; and in fair condition (see epitome). The road leads through fields and villages except one sandy waste patch at 10 m. and for 1½ m. waste and marsh after crossing Tiznaf river by a series of bridges at 15 m. Road winds a good deal but is bridged. Bridges would take horsed Field Artillery when in repair. At about 9 m. there is ½ m. of bazaar (Yak Shamba) and at 16 m. ¼ m. of bazaar. These are narrow with mud houses on each side. Posgam is a market town of 3,000 houses with a Chinese Amban, small Chinese garrison, and British aksakal (honorary).

*Camping ground.*—In the fields.

*Supplies, etc.*—Ample.

27 YARKAND .. 17 m. Road as before. Yarkand river is reached about 4 m. The

453 m. river bed is about 2 m. across and in August 1922 the river was flowing in 3 channels. Ferry boats on 2 channels with 2 boats at each crossing. The boats are punt shaped, 8' broad and 50' long, made of 3" planks.



ROUTE NO. XIV.—SECTION No. 1.—*contd.*

Each would carry 50 men with their equipment. They take the ordinary two-wheeled cart of the country and would take empty A. T. carts, but would have to be decked and ramp built to take field guns. They have crew of 4 to 7 men each.

The 3rd channel is thigh deep and has a good sandy bottom and the stream is not fast.

When the river is in flood the ferries are worked some miles down stream and 10 or 12 m. are added to this stage.

The Yarkand river is the only river or irrigation channel which would be a serious obstacle to horsed field artillery on the road between Karghalik and Yarkand, if the bridges were out of repair. Everything else could be crossed by a battery with less than an hr.'s delay, conditions being as in early August 1922.

From the left bank of the river it is 11 m. to Yarkand which consists of (a) the old city, mud built with ruinous mud walls, numerous gates and still more numerous gaps which a horse can cross.

(b) The new or Chinese city, mud built with a high and thick mud wall in good repair round it. It has two gates. (c) Many outlying quarters the most important being the Kongani, a Chinese Mussalman quarter, more or less between the two "cities."

There are gardens and trees right up to the walls on almost all sides now, so that the walls can seldom be seen from  $\frac{1}{2}$  m. away in summer.

Inside the walls is a maze of narrow streets, many roofed in with matting or sacking and few houses of any size or stability.

There is a Chinese Amban and a Chinese military Amban (who seems responsible for the Sarikol garrison), numerous Chinese officials and population, a British aksakal and staff and a colony of British Indian traders.

*Camping ground.*—There are several open spaces outside the wall.

*Water.*—Irrigation water plentiful, there are also numerous wells. Source of water supply should be carefully chosen (nearly a third of the Turki inhabitants of Yarkand suffer from goitre to all appearance).

*Fuel.*—Plentiful.

*Fodder.*—Bhoosa and a little grazing.

*Supplies.*—Of all sorts plentiful.



## ROUTE XIV SECTION 2.

FROM YARKAND TO AKSU *via* MARAL BASHI  
AND WEST BANK OF YARKAND RIVER.

284 miles 4 f.

16 stages.

*Authority.*—Captain Shuttleworth, 1908, Major Pereira, 1911.

*Epitome.*—This cart road runs through a highly cultivated district abounding in fuel, grazing and water. At the time of high water the river overflows parts of the road, forming muddy stretches which are only passable on embankments or faggot ways. In summer, horse flies infest parts of the route where is tugrak forest and make night marching advisable, *e.g.*, stage 1.

The people are practically all Turkis up to Kara-Shahr, only a few Chinese and Tungan. Then it is mixed Tungan (Mohammedans who dress and look like Chinese) and Turkí, the Tungan predominating from Kara-Shahr (where Pereira came across Mongols in 1911, probably Turgut Mongols) to Kumish. The Turkis again predominate at Tok-sun. Kara-Shahr with a large Tungan and Chinese population is the only city up to Tok-sun which looks like a regular Chinese city.

From Tok-sun to Urumchi 119 $\frac{3}{4}$  m. = 390 li; the li are longer, averaging just over 3 $\frac{1}{4}$  li = 1 m. The telegraph leaves the road at Tok-sun to go to Turfan, rejoining it with the Turfan road at 984 $\frac{1}{4}$  m. from Yarkand, *vide* Epitome Section 4. It again leaves it 5 $\frac{1}{4}$  m. further on to take a short cut over the Ta-pan-shan, rejoining it again 6 $\frac{3}{4}$  m. later. After that it is near or within sight of the road. The Turki element predominates around Tok-sun but from Paghr-saghran northwards is a thinly populated country (except around Ta-pan-Ch'eng, where Tungan farms are fairly plentiful), chiefly Tungan. Urumchi is one of the few cities where Chinese are numerically superior.

*Camping ground.*—Generally available at every stage.

Water.\*—

Fuel.—

Fodder.—

} Plentiful.

*Supplies.*—Ample at Maralbashi and Aksu: elsewhere limited.

\*Water is brackish between Chadir Kul and Aksu.



ROUTE NO. XIV.—SECTION No. 2.—*contd.*

No. of stage and total distance.	Details.
1 31 m. 4 f.	TEREK LANGAR ..31 m. 4 f. The road, passing Yakshamba and Charshamba. runs through cultivation. At Terek Langar there are 42 houses and 2 <i>musjids</i> .
2 63 m.	LAILIK ORTANG ..31 m. 4 f. The road runs (OPPOSITE LAILIK AND MERKET on r. b.) through desert and low jungle. At 18 m. pass a deserted <i>langar</i> . Lailik is a hamlet with a rest house in ruins. It is 1 m. W. of the Yarkand river, from which it is separated by a strip of tamarisk jungle. There is a ferry over the river connecting it with Merket. The Yarkand river is 60 yds. broad during the cold, and $\frac{1}{2}$ m. during the hot, weather. There are 2 large flat-bottomed ferry boats capable of carrying 160 men or 2 field guns. The current is 2 m. an hr. in the cold, and considerably more in the hot, weather. The river, early in April, is $4\frac{1}{2}$ ft. deep.
Supplies.—Nil,	at Lailik Ortang but can be procured from Merket 4 m. S. E. on the right bank of the Yarkand river.
3 79 m. 4 f.	MENUT ..16 m. 4 f. The road runs N. through Abad to Langar Awat 9 m. This is a large village with a weekly bazaar, and plentiful supplies. Thence N. E. to Menut, which is a hamlet with a Chinese rest house. Menut was a much more thriving village until Langar Awat was built by Lin Tajēn-fu of Yarkand, some years ago, when he opened out the country of Daulan, of which Merket is the capital.
Water.—Good.	
Fuel.—Scarce.	
Supplies.—Limited.	Sheep plentiful.
4 93 m. 4 f.	ALA-AIGYR .. 14 m. The road runs N. E. (Chinese name "Ssu T'ai" along the old bed of the Yarkand river. Between the road and the old bed there is a continual embankment to prevent the country being flooded. There is no danger of that, because at Ala-Aigyr the river has changed



ROUTE NO. XIV.—SECTION No. 2.—*contd.*

its source and flows about 12 m. S. of its old bed. At 5 m. pass Ak Dong, a hamlet, whence Route XIV L leads to Urdiklik on the main Kashgar-Peking road. Ala-Aigyr is a small hamlet with a rest house.

*Water.*—Good from river.

*Fuel.*—Plentiful.

*Supplies.*—Nil.

5 AKSAK MARAL .. 14 m. The road runs N.E. and lies alternately through dense jungle

107m. 4f. and flat plains covered with tamarisk scrub and abounding with small shallow lakes. The old bed of the Yarkand river runs 7 m. S. of the road. It is now quite dry. The jungle has been cleared round Aksak Maral for a radius of  $1\frac{1}{2}$  m. Aksak Maral is a small hamlet of 35 houses with resthouse in ruins. Friday bazar.

*Water.*—Brackish from ponds.

*Fuel.*—Plentiful.

*Supplies.*—Nil.

6 SHAMAL .. 18m. After passing a few farms the road again enters jungle

125m. 4f. with occasional stretches of dead stumps. This continues for most of the way, and the road then winds among sandhills. Shamal is a small hamlet with Chinese resthouse. The jungle has been cleared for cultivation; 3 m. N. of Shamal, jungle is reached. Shamal is another village which is declining owing to increasing scarcity of water. 30 houses.

*Water.*—Brackish from small lakes.

*Fuel.*—Plentiful.

*Supplies.*—Very limited; sheep plentiful.

7 MARALBASHI .. 14 m. Proceeding to Maralbashi a good road runs due N.

139m. 4f. across grassy waste and amongst sandhills. The road passes through a flat and marshy country with many brackish reed-covered lakes. It crosses some unsound bridges and embankments connected with the Maralbashi irrigation system. Water from the Yarkand River is brought by canal from Ala-Aigyr (stage 4).  $5\frac{1}{2}$  m. S. of Maralbashi the cultivation commences. Maralbashi is a small walled city with a busy bazar on Tuesday on the main road to the E. of the city.



ROUTE NO. XIV.—SECTION No. 2—*contd.*

## ROUTE NO. XIV (3).

FROM YARKAND TO MARALBASHI *via* RIGHT  
OR EAST BANK OF YARKAND RIVER AND  
BETWEEN YARKAND AND TIZUAF RIVERS.

*Epitome.*—On Captain Shuttleworth's map of Daulan (1908) (the country between Yarkand and Merket) a new road is shown between Yarkand and Aksu *via* Maralbashi, by the right bank of the Yarkand river to just S. of Maralbashi.

This road was found to be in good condition and fit for wheeled artillery throughout (1923). The whole of the country through which the road passes is very fertile and well irrigated. *Sheep and cattle* are plentiful.

The road crosses the river from the left to the right bank at Akata. *Abad Langar* is a new place built in 1906, midway on this road opposite to *Ajikti* and *Tagirchi*. The road from Abad follows the right bank of the river and about a mile from it through Chadar Tograk (10 m. N. of Abad Langar) and Ghaz Kul (9m. N. of Chadar Tograk) to Merket (7½ m. N. of Ghaz Kul) and thence *via* Lailik.

The Yarkand darya is fordable at Akata during the six winter months of the year, and at the crossing point there are large flat-bottomed boats (6 in number) capable of carrying 2 field guns each or about 160 men standing.

Abad and Ghaz Kul are two villages with bazaars once a week, *supplies* plentiful.

Chadar Tograk is a small *serai*, used as a resthouse by Chinese.

*Supplies*—In neighbourhood plentiful.

NOTE—There is a route XIV (3) (i) from Yarkand which crosses the Yarkand and Tizuaf rivers to Baghjigha (see note to Route XIV Sec. 1. Stage 25) and thence goes N. to Merket *via* Gehumen Bazar and Khadalik, to the East of the Tizuaf R.

## ROUTE NO. XIV (4).

FROM MERKET (RIGHT BANK) TO AKSAK MARAL  
ON LEFT OR WEST BANK OF YARKAND RIVER.

52 miles.

2 stages.

*Authority.*—Fitzmaurice, 1921 ; H. I. Hardinge, 1924.

*Epitome.*—It is possible that this route is identical with the main Route stages 3—5 above, but it is given as an alternative route since there do appear to be differences.



ROUTE NO. XIV.—SECTION No. 2.—*contd.*

No. of stage and total distance.	Details.
1 LALMA	.. 21m. Near Merket the road runs through cultivated land but cultivation gradually becomes scarcer. It then runs through a forest of stunted trees, and after that through a forest of dead tree stumps. At Lalma there are a few houses and trees; also a spring of good water. The road is very dusty and horse-flies are troublesome. Carts can travel quite easily by this road, but the main road from Merket to Maralbashi crosses the river at Aktum, one short stage from Merket.
2 AKSAK MARAL	.. 31m. At m. 4 the road passes Sachkok which consists of a few farms. Water here good. For most of the way the road runs through jungle of stunted trees and bushes, and the dust is very bad. There are occasional clearings in the jungle and some small lakes; a few farms are passed. At 10½ m. Ap-bang-dze ferry across Yarkand R. 1 small ferry boat; carts can only cross river when it is frozen. At m. 23 the old bed of the Yarkand river is crossed; this is wide and sandy, but quite dry. Jungle continues till Aksak Maral is reached; this is a small village which has suffered from the diversion of the water of the Yarkand river to Maralbashi. Fuel is abundant. Water in the ponds is brackish, but there is good water in a small canal. The Chinese name of Aksak Maral is Wu T'ai (the fifth post).
The road crosses some unsound bridges and embankments connected with the Maralbashi irrigation system. Water from the Yarkand river is brought by canal from Ala-Aigyr (Chinese name "Ssu T'ai"—fourth post). Maralbashi is a small walled city with a busy bazaar on the main road to the E. of the city; bazaar day is Thursday.	
MAIN ROUTE— <i>contd.</i>	
8 CHARBAGH (3,100')	.. 15m. About 1½ m. from the Chinese town the road skirts the right bank of the Kashgar river. Slight detours are neces-



ROUTE NO. XIV.—SECTION No. 2.—*contd.*

sary after rain, when the main road is liable to be flooded. The river is here about 50' broad and 3 to 6' below the level of the surrounding plain. From here the road leads across semi-reclaimed plain. Occasional houses are passed. The road then skirts the foot of the Mazar Tagh and reaches Charbagh. The latter is a fair sized Turki village of over 100 houses, with a population of 230 families.

*Water.*—From a well, good.

*Supplies.*—Bread and meat are sold. Weekly bazaar on Saturdays.

9 AK TUMCHUK — 18m. For the first 7 m.  
 (3,320') the road leads  
 172m. 4f. across a swampy  
 plain, covered with reed jungle. At 3½ m. Oigu-tan (10 Turki houses), rocky hills to left. At 8 m. pass a small village, at a hilltop beside which is a spot known as "Caliph Ali's Stable". A short distance N. of the road, at m. 13 are the ruins of an ancient city. Ten bridges are crossed, 3 of which are over narrow but unfordable branches of Kashgar R. (but in September 1903, no water was seen). At m. 7 the road rounds a spur from the N. and then crosses a reedy marsh which represents the Kashgar river. The road then traverses a grassy and bushy plain surrounded by detached hills, on which many ruined houses can be seen. At 9½ m. Oku-Mazar (12 Turki houses). At m. 13 the road passes between two low hills. It then passes through grass and a belt of tamarisk jungle, after which the oasis of Tumchuk is reached. At Tumchuk is a fair-sized Turki village of 50 Turki houses, with a Saturday bazaar. The oasis of considerable extent, but much land still remains uncultivated. Bazaar day is Monday and there is a fair inn.

*Water.*—Slightly salt.

*Supplies.*—In fair quantities, especially vegetables.

*Note.*—A detour can be made from Maralbashi to Tumshuk to the S. via the valley of the Yarkand or Tarim river; carried out by Mr. Skrine in November 1923.

10 CHADIR KUL ... 15m. At m. 1 some huts  
 (3,380') and cultivation are  
 187m. 4f. seen to the left and  
 a canal is crossed. At m. 3 another canal is crossed by a long  
 M226CGS



ROUTE NO. XIV.—SECTION No. 2.—*contd.*

bridge and patches of cultivation are passed. Kashgar river near E. of road for  $\frac{3}{4}$  m. After this the road winds among low sandhills, crowned with tamarisk bushes to Tang Toghrak, a new settlement (1924) of 29 houses including 4 inns at m. 7. Desert has been largely brought under cultivation, which ceases at m. 9. At m. 13, forest is entered. The road leads down a slight ascent to Chadir Kul. The latter is a collection of 10 huts in hollow.

*Camping ground.*—Good in summer.

*Water.*—Good from a branch of the Yarkand river.

*Supplies.*—Cows are kept, and milk, curds and butter can be obtained in small quantities.

11 YAKA KUDUK .. 12m. The track continues  
 ——— (3,210') through the thick  
 199 m. 4 f. *tugrak* forest where  
 horse flies abound. In this stage the telegraph mostly out of sight to the E. The soil is sandy with occasional firm patches, and is heavy going for carts. Dusty in summer. Several depressions are skirted; these are ponds at certain seasons. Yaka Kuduk is a village in the forest with a population of 15 families. Good Turki inn.

*Water.*—From a pond.

*Supplies.*—Nil.

12 YAIDA URTENG .. 13 m. The track is  
 ——— (JAIDI). heavy with loose  
 212 m. 4 f. sand till m. 6½, the  
 jungle gradually gets thinner; until near m. 10, only a few trees are seen. The road here descends slightly. At m. 12 there are many small culverts, most of which are in bad repair. The road, from here on, was embanked to a height of 2' above the surrounding country which (in September 1903) was flooded owing to recent rains. *A new road has now been made leaving the old road and telegraph lines some 2 or 3 m. to the S., i. e., the new road is N. of the old road.* The soil is clay. Jaidi is a desert post station containing a few huts. There is a little *chi* grass and some 40 cows were seen.

13 CHILAN ... 12 m. Gate (ruins of 10  
 ——— (3,000') houses, owing to  
 24 m. 4 f. stoppage of water  
 supply) is passed. At m. 10 a tower is sighted 3½ m. away



ROUTE NO. XIV.—SECTION No. 2.—*contd.*

to the N. W. The road passes through tamarisk jungle, 8-10' high in places. Each bush collects a small sandhill round its roots. Chilan is a desert village of 30 houses including 6 inns. Range running easterly some 10-15 m. to N. N. W.

*Water.*—Brackish.

*Supplies.*—Nil.

## ROUTE NO. XIV (5).

## FROM YAKA KUDUK TO CHILAN (ALTERNATIVE).

This route is only passable at certain seasons when the country is dry. The route usually taken does not pass through Yaida Urteng but makes a long detour, the distance from Yaka Kuduk to Chilan being 30 m. the telegraph line follows the long route, on which there are no habitations. Jungle continues from Yaka Kuduk to m. 12 where there is a deserted ruin; *here a jungle road branches off to Awat.* The road then crosses a bare and open desert to Chilan: the going is good except for mud at certain seasons in the clay soil near Chilan. Brackish water from a pond.

MAIN ROUTE.—*contd.*

14 SHAN KUDUK .. 22 m. At m. 4 pass a langar, and at m. 246 m. 4 f. 18 pass a group of ruins known as Chur Kuduk. Shan Kuduk is a group of six small inns in the open desert with good well water.

*Water.*—From two wells.

*Fodder.*—Nil.

15 AI-KUL .. 18 m. Desert continues up till 8 m. (3,110') where there is a small village, El-hongdee, 5 Turki houses. Beyond this village there is intermittent cultivation. At m. 13 Sai Arik is passed; this is a small village with a bazaar on Thursdays. Aikul is a large place with a bazaar on Fridays. There are numbers of irrigation channels near Aikul, crossed by bridges in more or less bad repair; but none of the drainage channels, 20' wide and 6' deep, previously described, were seen. Aikul has 125 (Turki) houses. Plain still fertile to E., grass to W.



ROUTE NO. XIV.—SECTION 2.—*contd.*

16 AKSU .. 20 m. The stream at m.  
 (3,370') 1 is no longer crossed  
 284 m. 4 f. by a ferry, but by  
 five good bridges. At m. 9 the road from Awat joins the main  
 road on the right bank side. 10½ m. Bay-Shur-luk, village of 10  
 Turki houses. The Aksu river can be crossed by two double  
 cantilever bridges over rapid current and by a ford 2' deep  
 where current slow. In winter Aksu river runs in three small  
 channels, each 40' wide. Much damage is done at Aksu New  
 City (Aksu Yangi Shahr), every year by floods, the city being  
 very low-lying. Aksu Old City is 5 m. from the New City.  
 Bazaar day in the New City is Thursday, and in the Old City  
 is Friday.

## ROUTE XIV SECTION 3.

FROM AKSU TO TOKSUN *via* KUCHAR AND KARA-  
 SHAH.

588 miles.

29 stages.

*Authority.*—Lieut. Campbell, 1903; Major Pereira,  
 December 1911; Fitzmaurice, 1921; Brig.-General  
 R. Pigot, November and December 1923.

*Epitome.*—A cart road throughout, though the traffic  
 chiefly donkeys and camels. The road is generally sandy  
 and heavy in places. The ascents and descents are  
 gradual and present no difficulty. The existing bridges are  
 poor, and are, as a rule, made of brushwood or logs. The  
 telegraph line from Kashgar to Urumchi and Turfan is near  
 the road throughout. There are two passes on the road. The  
 Shildar pass, stage 9, and the pass over the range between  
 Kumush and Arghaibulak. Neither of these passes presents  
 any difficulty to transport. At stage 20 the road runs through  
 a narrow ravine between hills and it might require repairing  
 here to make it fit for wheeled transport.

*Aeroplane landing grounds.*—Available everywhere.

*Tanks.*—An easy tank route throughout and most of the  
 country on either side of the road good tank country.



ROUTE NO. XIV.—SECTION No. 3.—*contd.*

*Camping ground.*—Everywhere for as large a force as required. Billeting in villages should be avoided owing to prevalence of small-pox and great prevalence of venereal.

*Water.*—Generally scarce as the road runs for the most part through desert. Water at all the stages but sometimes brackish.

*Fuel.*—Scarce except at the larger villages. A force of any size must make special arrangements.

*Fodder.*—Scarce, but probably obtainable in all the larger oases. A force of any size must make special arrangements for carrying from the larger villages.

*Supplies.*—Scarce, except at the larger villages, and towns. The country is for the most part desert with not much grazing.

No. of stage and total distance.	Details.
1 26m.	CHAM (CHAMATAI or JAM) 26m. The road passes through a well watered and partially cultivated oasis. At m. 10½ it joins the main road to old Aksu. At m. 18½ and m. 21¾ streams are crossed by bridges. At 25¾ m. the Cham river is forded. There is a foot bridge and causeway. Cham is small village of 100 Sart houses and shops. (Weekly bazaar on Mondays).
2 41m.	KARA-YULGUN 15 m. At m. 1¾ a branch of the Cham river is crossed by a ford. The country is a waste of sandhills and grass. At m. 2, 5¼, and 7, small streams have to be forded. The country from there onwards is covered with sandhills and scrub. At m. 14¼ the bed of the Avat river is crossed. (There was very little water at the end of May 1921). On 8th November 1911, there was 1' water at Awat, further N. Kara-yulgun is situated in an oasis and there are about 30 Turki families in the village and a few Chinese telegraph repairers. There is a large official inn, formerly a cavalry post.

*Supplies.*—Limited.



## ROUTE XIV (O).

*SASA track runs E. along Tarim river—Ungen-Darya—  
past Perse to KOSHTAM (Vide lateral routes).*

3 CHURGA 30 m. From Kara-  
—— (T-feh-Shui is Chinese name). yulgun the road runs  
71m. (4,590') for 2 m. N. N. E.  
over a waste plain ; then a rocky and sandy ridge 100 ft.  
high is crossed. This is the first hill crossed on the road from  
Kashgar. From here to m. 14 $\frac{3}{4}$  the road runs over a barren  
plain. It then winds among bare hills. At m. 20 the road  
passes a small inn with good water, known as Tograf Dheng.  
At m. 24 $\frac{1}{4}$  a small plain shut in by bare hills is crossed, at m.  
29 a small stream is forded. Churga is a small village of 4  
houses and an inn. There is a disused copper mine behind  
the village.

*Water.*—From a small spring.

*Supplies.*—Nil.

4 YAKKA ARIK .. 10m. The road crosses  
—— (In Chinese Ch'a -Ch'i pro- an undulating plain  
81m. nounced Sa-Chi). with gradual ascent  
(at 2 $\frac{3}{4}$  m. height 4,660' and at 3 $\frac{1}{2}$  m. height 4,850') to m. 4 $\frac{1}{2}$ ,  
when the summit of the Topa Dawan pass (5,130') is reached  
after a short steep ascent. The pass is descended by a defile  
30' wide. The road is deep with sand. At 8 $\frac{1}{2}$  m. a canal is  
crossed and cultivation is entered. The country is here a  
plain stretching from 12 to 13 m. to the N., to the foothills  
of the Thian Shan, and 15 m. to a rugged range in the  
S. Yakka Arik is a village of about 120 Sart houses and shops.  
There is one Chinese office. New farms scattered about plain.  
The weekly bazaar is on Wednesdays. The old refinery of  
Churga copper mine is here.

(NOTE.—From here Route XIV N leads to Kunya Shah).

*Supplies.*—Fair.

5 KUSHTIMI .. 11 m. Road crosses a grassy  
—— (Hei-mi-tzu-tien, Chinese plain with a few  
92m. name) (4,220') farms. The Muzart  
river, m. 5 $\frac{3}{4}$ , was forded easily in the end of May 1921,  
and without much difficulty in the middle of July ; there is  
a ferry boat for use when necessary. In September 1903



ROUTE NO. XIV.—SECTION No. 3.—*contd.*

the river was 200 yds. wide, flowing in 5 channels divided by sandbanks. In winter river is easily fordable in its 2 or 3 small channels. At m. 9 a small river flowing into the Muzart is crossed by a bridge. The road is lined with trees and the surrounding country has houses and patches of cultivation.

Kushtimi is a small scattered Turki village with a Government inn. Horse flies are troublesome on this road in the summer.

*Supplies.*—Scarce.

6 BAI .. 21 m. The road runs  
 ——— (Pai-cheng Hsien) (3,730') through a little culti-  
 113 m. vated area. At m. 7 a  
 group of houses is passed, and the road then crosses a stretch  
 of bare desert which continues till m. 14 when the Bai oasis  
 is entered. At m. 16 a stream is crossed by a bridge. At m.  
 18 another stream is crossed also by a bridge, while the other  
 smaller streams are forded. The road now runs through culti-  
 vation until Bai is reached. This is a unwall'd city of about  
 450 Sart houses and some 50 Chinese shops.

There is a *Hsien Kuan* at Bai. Bazaar day is Friday.

*Supplies.*—Plentiful.

7 SAIRAM .. 23 m. 4 f. The road crosses  
 ——— (Sali-mu) (3,790') a plain with many  
 136 m. 4 f. farms dotted about.  
 A stream having several channels is then forded. At m. 4  
 a large grave-yard, containing tombs of Mahomedan  
 appearance is passed. At m. 7 a river bed  $\frac{3}{4}$  m. broad is crossed.  
 At m. 8 a wide dry river bed is crossed. At m. 10 the small  
 village of Lan Ko is passed. From here the country is fertile,  
 with occasional barren patches. Some irrigation channels  
 are crossed. At m. 12 the small village of Langar is passed.  
 At m. 19 $\frac{3}{4}$  a bridge over a small stream is crossed. Sairam  
 is a considerable village of over 25 houses at the eastern end  
 of a big oasis which continues, with some barren patches, to  
 Bai. Bazaar day is on Friday. There are good inns but  
 no camping grounds.

*Supplies.*—Fair.

8 KIZIL .. 10 m. 6 f. Road leads  
 ——— (Ho-tzu) (3,640'). over a barren waste  
 147 m. 2 f. and at m. 5 traverses



ROUTE NO. XIV.—SECTION No. 3.—*contd.*

a small oasis in which there is a spring and a few huts. Country is again barren to m. 8 when the oasis is entered. At m. 10 there is no bridge over the river, which in the summer is large and is sometimes forded with some difficulty. Kizil is a small village of about 15 houses and a good Chinese inn. Bazaar day on Fridays. It is a better halting place than Sairam.

*Supplies.*—Scarce.

## ROUTE NO. XIV (6).

*From BUGUR BAZAAR. (Judging from Sir A. Stein's Survey maps) a route runs N. E. 40 m. 2 stages, through Mis-bulak to KERE BAZAAR whence it proceeds 16 m. N. E. to KARA KUL and then S. again to KUCHAR via TIKMIK and W. bank of Kuchar river.*

9 TOGRAK DHUNG .. 22 m. The road ascends  
4,120'. gravel bank 50' high  
169 m. 2 f. and then leads over  
a plain covered with low scrub. This plain slopes up to the  
E. At m. 11 the road passes an under-ground dwelling with  
a well. There are hills 12 m. to the N. and behind them the  
Thian Shan. Another range of hills 8 m. to the S. is seen.  
The hills to the N. close into the road until at m. 12 they are  
only 4 m. distant. At m. 13 $\frac{3}{4}$  Yao-Chan-tzu, a Sart inn, is  
passed. The road leads up a gentle incline until at m. 18  
the top of the Shildar\* Dawan is reached, height 4,950'. Near  
the top are two Chinese houses, for collecting Likin (Customs  
duty), Ta-pan-Ch'ai-tzu. There is a steep descent for  $\frac{3}{4}$  m.  
after which the descent is more gradual. At m. 18 $\frac{3}{4}$ , (4,560')  
the road winds among low hills. Tograk Dhung consists  
of one Chinese official inn and a post office relay house, and is  
situated in a windy ravine.

It is advisable to arrange for water and supplies to be brought from Kuchar.

*Water.*—Scarce and brackish.

*Supplies.*—Nil.

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\* There is some doubt as to whether the pass at m. 18 is really the Shildar Dawan.



ROUTE NO. XIV. SECTION No. 3—*contd.*

10 KUCHAR .. 18 m. The road now enters  
 ——— [K'u-ch'e-chou meaning a broad valley which  
 187 m. 2 f. "Treasury Cart"] City) 3,030'. narrows to 50 yds.  
 at m. 6, and here a barrier has been erected and there is a customs  
 house, Yen-shui-ch'ai-tzu. The road from here gradually  
 rises, and the breadth of the ravine in which it runs, varies  
 from 250 to 50 yds. in width. At m. 13 the ravine is left, and  
 the top of the rise is reached. From here to m. 16 the road  
 runs through a gravelly plain and then passes through fertile  
 country on which there are a few scattered farms and orchards,  
 Sha-maibak, 15 m. The ground near the city of Kuchar  
 has many tree enclosures on it. At m. 17½ the N. gate of  
 the Chinese city is passed and at m. 17 that of the Turki city.  
 Kuchar contains some 9,000 families, chiefly Turki,  
 though there are some 120 Tungan and 600 to 700 Chinese.  
 All the shops are in the Turki E. suburb. It is a great fruit-  
 growing centre. In Kuchar city there is a large bridge over  
 the Kungai Koksui river, but the bridge was damaged by floods  
 in the summer of 1921. High water is at 8 a.m. and the  
 river, if not fordable then, can be crossed later in the day.

*Supplies.*—Plentiful.

11 YAKKA-ARIK .. 20 m. 6 f. The road passes  
 ——— (T'o-ho-nai) 3,060'. through suburbs and  
 208 m. after 2 m. enters the  
 open plain, though farms and trees are to be seen to the S.  
 all the way to Yakka. The road then crosses a waste plain,  
 which stretches as far as the 600'—800' hills to the N. At m. 15  
 a small stream is forded and at m. 17 ¾ another stream is crossed  
 by a bridge. There is an inn here. Yakka-Arik is situated  
 in a large oasis which is well wooded, but a good deal of the  
 land lies fallow. There are some 80 houses and shops, and a  
 poor Sart inn.

*Water.*—From a stream running through the village.

*Supplies.*—Scarce.

12 CHUL ABAD .. 16 m. The road con-  
 ——— (Ta-lo-pa) tinues over a desert  
 224 m. waste with a low  
 range of sand hills 2 m. to the N. At m. 12 there is a low  
 range of hills 100' high 4 m. to the N. with the snowy range of



MAIN ROUTE NO. XIV. SECTION NO. 3—*contd.*

the Thian Shan 20 or 30 m. away behind it. At m. 7 the road passes through sandhills which stretch 12 m. to the N. and right away to the S. There are 7 Sart houses and an inn Chul Abad.

*Supplies.*—Scarce.

13 YANGI ABAD OR AWAT 14 m. The road runs  
 ——— (Erk-pa-tai) 2,820'. in a straight line  
 238 m. across a gravelly  
 waste. A small spring is passed at m. 4 and, at m. 13, a small stream is forded. Yangiabad is a small village of some 30 houses and a poor inn.

*Supplies.*—Scarce.

14 BUGUR 26 m. The road runs over  
 ——— (Lun-t'ai-Hsien meaning Cart a barren plain, 600'  
 264 m. wheel platform city). 2,790' hills, 15 m. to the N.,  
 with the snowy Bugur range (a S. branch of the Tien Shan) behind,  
 some 30 m. off. A small stream is crossed at m. 7. At m. 16  
 Shor Pak village is passed. It consists of some 50 scattered Sart  
 farms with three or four shops. From here onwards the country is  
 more cultivated and there are a few scattered farms most of the  
 way to Bugur. At m. 19 the Ch'un-pa Ho (Dinar river ?)  
 is forded in two small channels. At m. 22  $\frac{1}{2}$  the road runs  
 S. E. Bugur is an unwallled city with over 3,000 families, most  
 of them Sart, though there are about 300 families from Tientsin,  
 and nearly 100 Tungan families.

NOTE.—From Bugur Bazaar a route runs N., 54 m., 3 stages  
 to Kara Dawan, 11,820'.

*Supplies.*—Plentiful.

15 YANGI HISSAR . . 24 m. On leaving the city a  
 ——— (YANG-ISAR) 3,010' stream is crossed by  
 288 m. a bridge and the road  
 runs through cultivation. Beyond this, at m. 2, there is a small  
 bridge over a stream and the road enters a barren waste with  
 some scrub. At m. 20 there are some trees and scattered farms  
 and the road is lined by poplars and *tcgrak* trees. At m. 22  $\frac{1}{2}$   
 a small stream is crossed by a bridge and, further on, a small  
 stream is crossed by a bridge leading into Yangi Hissar. Yangi  
 Hissar is a fair sized village comprising some 150 Sart, 10 Chinese,  
 and 6 Tungan houses. It is surrounded by rough mud walls. The  
 total population of the oasis is about 5,000.



MAIN ROUTE NO. XIV. SECTION No. 3—*contd.*

16 CHADIR .. 19 m. A small stream is crossed, and scattered houses are passed. At 307 m. m. 1 another stream is crossed. The road then leads for 3 m. across a barren plain. At m. 4½ Mozar (inn and scattered Turki farms). At m. 9 there are trees and low bushes on either side of the road. These come to an end at m. 15½. At m. 18 a stream is forded. At m. 19 there is a bridge leading over a stream after which Chadir is reached. This comprises some 30 Sart houses and shops.

*Water.*—Muddy, from the stream.

*Supplies.*—Obtainable in small quantities.

17 ISHMA .. 11 m. The road runs through cultivation and there are a few small farms on either side. At m. 1 a stream is forded and another at m. 2. Here the cultivation ends and is replaced by, at first, trees and grass, and later, trees, low bushes and scrub. A stream is forded and Ishma entered at 11 m. Ishma comprises 80 Sart, 3 Chinese, and 2 Tungan families. There is good Sart inn.

*Supplies.*—Very limited.

18 CHARCHI (CHAI-CHOU' but not a "Chou" city) 2,760'. .. 23 m. The road leads through a deserted waste covered with scrub, till m. 341 m. 7½, when a *tograk* wood is entered. At 9½ m. Kuruk-Ishma (a Turki inn). There is, at m. 15, a high range of hills, 6 m. to the N. (a S. branch of the Bugur range, called by the natives Kuruk Tagh, i.e., "bare hills" and by the Chinese "Kau Shan", though it has no real name.) It continues N. of the road to N. of Kur-la, about 55 m. further E. The road is dusty. At m. 16 there is a belt of grass and scrub until m. 19½, when a belt of jungle is again traversed. At m. 20 the country changes to grass and scrub and then a few farms are passed. Beyond this a dry river bed is crossed and Charchi is reached. 30 Turki houses, very poor inn.

19 TIM .. 27 m. 6 f. The road leads across a desert plain. At m. 368 m. 6 f. (TA-TUN-TZU) 2,610'. 8 a Sart house Yau Tagh, is passed. Tim is a village of 55 Sart houses and a fair inn



MAIN ROUTE NO. XIV. SECTION No. 3—*contd.*

20 KHURLA .. 18 m. The road crosses a waste plain. The hills are 6 m. to the N. At 6 m. Shang-kho, a village consisting of 20 Sart farms, is passed. At m. 16 the road to Khurla leaves the main road and turns to the S. Khurla consists of two cities, with over 6,000 Turki families and only 180 Chinese and Tungan families, the Chinese city being traversed to reach the Turki quarter beyond.

*Supplies.*—Plentiful.

21 CHORCHUK .. 18 m. 6 f. At  $\frac{1}{2}$  m. from the Chinese city a canal is crossed and the road passes out of the oasis. A spur is then crossed and the road descends to where, at m. 5, there is a Kharantai customs barrier. The road is closed by a gate. At m. 6 the village of Hasi-t'ou is seen on the opposite side of the river. There is no bridge. The Kon-che river now foams down a narrow gorge and the road leads up its right bank and along a rocky ledge. The hills vary from 100 to 500' on either side. Out-crops of coal are passed and some mining has been done. At m. 8 the ruined fort of Kharantai is passed. At m. 9 $\frac{1}{2}$  the road and river leave the gorge. The river is here 50' to 100' wide flowing in a deep bed between grassy banks. The road is on a ledge above the river bank. At m. 11 $\frac{1}{2}$  the road begins to ascend slightly through sand hills and leaves the river. Chorchuk is a small village of some 10 Sart houses with a poor inn. It is infested with mosquitoes. Kuruk Tagh ends some 12 m. to the W.

*Water.*—Good from a well.

*Supplies.*—Nil

## ROUTE NO. XIV (7).

## FROM TIM TO CHORCHUK (ALTERNATIVE).

The direct route to Chorchuk turns to the N. at 16 m. from Tim, leaving Kurla about 2 m. to S. E. and at 18 $\frac{1}{4}$  m. enters gravelly hills. Slight descent and winds along Kon-che' river (on right) flowing southerly, strong current, not frozen. At m. 20, A-ba, 4 Turki houses. At 24 $\frac{1}{4}$  m. Bashagam (Haman-Kou), 3,120', 2 houses and poor Turki inn. Hills recede on either side. Along side river, across sandy plain with shrub, leaving river at 28 $\frac{3}{4}$  m. and reaching Chorchuk at 37 m.



ROUTE NO. XIV. SECTION No. 3—*contd.*

22 KARASHAR .. 15 m. The road is hollow, taking one line of traffic, and winds among sandhills. At m. 5 the village of Danzil (Chinese Ssu-shi-li-Ch'eng) is passed (though it is only 3 m. from Karashar). This consists of 40 Sart and Tungan houses. Near it is a ruined mud fort. The road now crosses rolling ground, the soil of which is clay and the hollows flooded in summer. At m. 15 the Karashar river is crossed by a ferry in the summer. In winter it is frozen. The river is barely 500' wide, slow and muddy. It flows through a marshy prairie to the Bagrach lake. On the far side of the river, the road skirts a suburb and the city is entered by the S. gate. Total population 4,400.

All the shops are in the S. unwalled city. The N. mud-walled city is Chinese official quarter, is mostly waste with 700 families. Inhabitants mostly Tungan with a good many Chinese, fewer Turkis. Some Mongols come in from the country through S. and E. gates of N. city.

There is a Government inn inside the town, the others in the S. suburb.

*Supplies.*—Plentiful.

23 TOWILGHA .. 24 m. 4 f. For the first 7 m. the road runs through the oasis. Then a canal is crossed and the road leads into a sandy scrub-covered plain. In summer this plain is often flooded from the heavy rains and the melting of the snow in the mountains. A small stream is crossed at 13½ m. and another at m. 20¾. There are no bridges over these streams. Towilgha is a small village consisting of 8 Tungan, 4 Chinese and 4 Sart families. There is a poor Sart inn.

*Supplies.*—Nil.

24 USHAKTAL .. 24 m. 4 f. On leaving the oasis the road runs across a sandy belt. The Kurughut Tagh, bare rocky hills, 800' high, are visible 9 m. to the N. The road is sandy. At m. 5½ Tagharchi, small village of 1 Sart and 3 Tungan houses, is passed. At m. 10½ a well wooded and watered oasis is passed. This is the haunt, in summer time, of thousands of mosquitoes. At m. 13¾ and 14¾



ROUTE NO. XIV. SECTION No. 3—*contd.*

the two villages of Chokkur are passed containing about 6 houses each. At m. 15 a slight rise on the road is crossed and from the top of this the Bagrach Kul about 14 m. to the S. is visible. Near m. 22, several small streams are forded. These are frozen in winter. Ushaktal consists of some 80 Tungan, 10 Sart and 2 Chinese families. Good inn kept by a Turki.

*Water.*—Plentiful.

*Supplies.*—Are obtainable in small quantities.

25 KARA KIZIL .. 34 m. There is a gradual rise  
 ——— (CHINESE YUSHOU-KOU) up a sloping plain  
 503 m. 4,360'. with hills 1 m. to the  
 right. At 8 $\frac{3}{4}$  m. Bagrach Kul is lost to view. Hills soon recede  
 and at m. 10 $\frac{3}{4}$  the crest is reached. From here there is a gradual  
 descent and the hills recede on either side. At m. 18 $\frac{1}{2}$  a Chinese  
 inn and well called Hsin-ching-tze, meaning "new well" (Shah  
 Shinza) are reached. From here there is again a gradual rise  
 and the hills to the N. close in. At m. 20 $\frac{1}{4}$  there are hills, 800'  
 high, 2 m. to the N., and hills 300' high, 6 m. to the S. At m.  
 29 $\frac{1}{4}$  the hills are 100' high, and only a m. away, with higher hills  
 behind.

At m. 30 $\frac{1}{4}$  there is a gradual descent and from m. 31 the road  
 runs down a valley among hills 30 to 50' high. Kara Kizil con-  
 sists of one miserable Sart inn. Mosquitoes are very bad in  
 summer.

*Water.*—From a well.

*Fuel.*—Very poor. It is advisable to bring charcoal from  
 Karashar.

*Supplies.*—Nil.

26 KUMUSH .. 21 m. The road winds down  
 ——— 2,590' through the Igerchi  
 524 m. Tagh, which are bare  
 hills 100 to 300' high. The bottoms of the valley are flat and  
 are filled with shingle and triturated slate, making the going  
 heavy. The road runs through a ravine 100 to 200 yds. wide  
 bordered with high cliffs of rock. At m. 5 $\frac{1}{4}$  the plain is reached.  
 This is bordered to the N. by hills 8 m. away and to the S. by  
 the Igerchi Tagh only 1 $\frac{1}{2}$  m. away. At 8 $\frac{1}{2}$  m.,—2,760', there is  
 a certain amount of tamarisk scrub on this plain. At m. 13 $\frac{1}{4}$   
 a dry *nullah* running N. is crossed and at m. 14 $\frac{1}{2}$  another run-  
 ning S. E. At m. 18 $\frac{1}{4}$  sand hills are passed to the left of the road,



ROUTE NO. XIV. SECTION No. 3—*contd.*

(120° 50') S. E. Kumush is a small village of 5 Sart and 4 Tungan families. There is a fair Tungan inn, and a post of 4 Chinese soldiers. (Hsun-fang-uti-chang-lui-e, middle division, from Urumchi).

*Water*.—From a small stream flowing S. through the village.

*Supplies*.—Nil.

27 ARGHAI-BULAK .. 33 m. The road leads for 11 m.  
 (CHINESE A-HO-PU-LA) 3,820'. across the open plain,  
 557 m. crossing two or three  
 dry water courses on the way. 15 m. to the N. a snow covered  
 range is visible. At m. 11 the hills are entered and the  
 road winds up among them to the top of the pass near m. 24.  
 The top of the pass is some 5,790' above sea-level. From m. 5  
 to this point the road ascends nearly 3,000'. At m. 18½ the  
 horse relay post of Ujme-Dong (Chinese Sang-shuyuan tzu,  
 meaning mulberry tree enclosure) is passed, 4,650'. Two  
 Chinese men in charge. At m. 24 the road enters a ravine 300  
 to 400 yds. wide down which it winds to Arghai-bulak. The  
 descent is not very steep but the road is stony and the going  
 heavy. Arghai-bulak consists of two poor Sart inns and a  
 small Chinese temple. It is situated on a ledge above the bed  
 of the *nullah*. The cliffs on all sides are 400 to 500' high.

*Water*.—From a good spring.

*Fuel*.—Advisable to bring some good firewood from Kumush

*Supplies*.—Nil.

28 SUBACHI .. 16 m. The road continues  
 (CHINESE ERH-TAN). winding down the cliff-  
 573 m. bound ravine. The  
 average width of the ravine is 150 yds. and the cliffs are 300 to  
 500' high. At m. 2 the stream disappears into the ground and  
 at m. 10½ it re-appears. It crosses the road in many places and  
 parts of it are often frozen in winter. The road is liable to be  
 washed away when floods occur. Subashi consists of a single  
 inn and horse relay post.

*Water*.—From a stream on the edge of which the inn stands.

29 TOKSUN .. 15 m. The road leads on  
 down the ravine, by  
 588 m. stream sunken 70' to  
 30' below plain. At m. 5 there is a steep ascent out of the *nullah*  
 for 20' up a rocky slope. The hills are now left behind and the



ROUTE NO. XIV. SECTION No. 3.—*concl'd.*

road leads across a gravelly plain. The going is sandy and heavy in places. Atm. 12 the road becomes more level and grass and scrub appear. Toksun is an unwalled village of 3,000 families, chiefly Sart, but over 300 Tungan and 4 Tientsin families. There is a fair Tungan inn. Shops are in the Tungan town. There is a mud-walled camp on the E. side with 50 Chinese soldiers, Hsun-fang-tui. A telegraph runs from here to Turfan. Coal is used which is brought from Kur-chien, two stages to the N.-W., mine worked by Turkis. *The road branches here, one branch going N. to Urumchi and the other E. to Turfan.*

*Supplies.*—In fair quantities are obtainable, but these are chiefly brought from Turfan.

## SECTION No. 4.

FROM TOKSUN TO URUMCHI, *via* TA-PAN-CHING.

118 $\frac{3}{4}$  miles.

6 stages.

*Authority.*—Major G. Pereira, 1912.

*Epiome.*—Cart road throughout, no difficult gradient though the road rises and falls considerably. The road is sandy in places and is unbridged. The telegraph line which in left at Toksun, joins the road again at stage 2, leaving it again 6 $\frac{1}{2}$  m. further on to take a short cut over the Tapan Shan, and finally rejoins it 7 m. later. From here it is close to the road throughout. The country is thinly populated except near Ta-pan-cheng, where there are a good many Tungan farms.

*Camping ground.*—

*Water.*—

*Fuel.*—

*Fodder.*—

*Supplies.*—

} Available at each stage for at least  
one brigade and for a division at  
each town.

No. of stage and total distance.	Details.
1	PACHA .. 30 m. the road leads N.-W.
—	SAIGHAN (CHINESE through the town and
..	SHIAO-TSAO-HU) 1,110'. at $\frac{1}{2}$ m. crosses the
	Data river (Chinese Ta-Ho) by a wooden bridge which is often



ROUTE NO. XIV. SECTION No. 4—*contd.*

swept away when the river is in flood. The road runs up a gradual rise and is dusty. There are a few scattered farms on either hand until m.  $6\frac{1}{2}$  where the road turns to the N. At m.  $18\frac{1}{4}$  Turgut-Sigan (Chinese Ta-k'an-tzu) is passed, where there is a poor Sart inn. At m.  $18\frac{1}{2}$  there is a 50' ridge on the right and a 100' ridge  $1\frac{1}{2}$  m. to the left for 3 m. The road is now more level and has a bearing of  $350^\circ$ . At m.  $21\frac{1}{2}$  there is a steep descent, and then the road runs across a plain. The going is very bad and stony. At m. 24 the forward bearing is  $335^\circ$ . Pacha Saigan consists of 4 Tungan and Sart houses. There is a poor Sart inn.

2 HO-GULU .. 19 m. The road, bearing  $335^\circ$   
 —————(CHINESE NAME HOU-KOU leads along the stony  
 49 m. —REAR DITCH) 2,150'. valley 3 m. wide between 300' hills, which close in. At m.  $4\frac{1}{2}$  it turns to the right to bearing  $28^\circ$ , and leads up gravelly hills by a winding not very steep ascent. At m.  $7\frac{1}{2}$  the road is more level and the bearing  $342^\circ$ . At m.  $8\frac{1}{2}$  the top of the Pai-yang-ho pass, 2,560', is reached. The road descends from here at an easy gradient, bearing  $315^\circ$ . There is a little scrub on this side of the hills. At m.  $10\frac{3}{4}$  the Turfan road and telegraph line comes in from the right. The road descends gradually and the high Ta-pan Shan range with some snow can be seen to the right. At 18 m. Pai-yang-ho, consisting of 2 houses, a Chinese likin station and an inn, is passed. The road now leads up an undulating valley. Go  $285^\circ$ . At m. 16 the telegraph wire turns to the right up a foot path over the Ta-pan-Shan. The bearing of the road is now  $265^\circ$ .

Hou-Kou is a poor Tungan inn; to the W. and S. of it is the Hou-Kou river flowing to the E.

3 TA-PAN-CHENG .. 12 m. The road runs N.-W  
 —————(CHINESE NAME). near the Hou-Kou  
 61 m. river and is very stony. At m.  $1\frac{1}{2}$  it turns to  $20^\circ$  and goes up a winding, moderately steep ascent. The road is fair but gravelly. At m.  $2\frac{3}{4}$  it runs to the N. but is winding. At m.  $3\frac{3}{4}$  the telegraph line rejoin the road. At m. 4 the pass at the top of the Ta-pan-Shan is reached. Height 3,610'. The road descends on a bearing of  $300^\circ$ . For a m. the descent is gentle. At m.  $5\frac{1}{4}$ , 3,020', there is a steep descent and the road runs on a bearing of  $350^\circ$ . At  
 M226CGS S



ROUTE NO. XIV. SECTION No. 4—*contd.*

m.  $5\frac{3}{4}$  the descent is again gentle and the bearing is  $280^\circ$ ; this is the bearing to the end of the stage. At m.  $8\frac{1}{2}$  the Hou-Kou river which flows W. through a gap in the hills, 2,750', is crossed. The road is stony, along a plain which stretches some 10-15m. to N. to high range, the Bogdo Ula, with some snow, which runs W. N. W. At m. 9 the road passes Dawan-Shan village of 7 Tungan houses. It then passes some scattered farms and crosses a tributary of the Hou-Kou river.

Ta-pan-Chang consists of 100 houses and shops, chiefly Sart. This is the regular stage, (called 30 li from Hou-Kou.)

4 TS'AI-O-PU .. 26 m. The road is gravelly  
 ————— (CHINESE NAME) 3,148'. and stony. There are  
 87 m. bare gravelly ridges to

the N. and farms to the S. At m.  $2\frac{1}{2}$  the farms come to an end, and there is some grass to the left of the road. At m. 3 the road bends S. W. for  $1\frac{1}{2}$  m. and the country is gravelly with some scrub.

At m. 9 a small Tungan inn, Pa-cheng-tzu, is passed, 2,910', where they burn coal. The road bearing  $285^\circ$ , leads across a bare plain with some scrub, and is good, with some grass to the S. At m.  $13\frac{1}{2}$  there is a small lake to the S. At m. 14, T'ou-tun-tzu, consisting of 3 Tungan houses, is passed. At m. 20 the end of the lake is reached. Beyond this there is some grass. Ts'ai-o-pu is a village of 30 Tungan houses. (This is the regular stage called 90 li, reality  $26\frac{3}{4}$  m. from Ta-pan-cheng).

5 CHI-CHI-TS'AO .. 17 m. The country is scrubby.  
 ————— (CHINESE NAME) 3,310'. The only two houses  
 104m. on this stage are two  
 inns. The bearing of the road is  $325^\circ$ . At m. 14 the high range to the N. comes to an end, but low hills close in on that side. At m. 15 the road leads round to the left of a 200' hill, on a bearing of  $290^\circ$ , and then leads across a small valley. Chi-chi-ts'ao consists of two Tungan inns amongst low hills.

6 URUMCHI .. 14 m. 6 f. The road leads on a  
 bearing of  $260^\circ$ , down  
 118 m. 6 f. a valley among low  
 grassy hills. At m.  $1\frac{1}{4}$  the bearing changes to  $285^\circ$ . At m.  $2\frac{1}{2}$  the road winds and is up and down on a bearing of N. At m.  $3\frac{1}{2}$  the road runs down a valley bearing of  $280^\circ$ . At  $4\frac{1}{2}$  it goes on a bearing of  $330^\circ$  over low grass hills and at  $6\frac{1}{4}$  winds



ROUTE NO. XIV. SECTION No. 4—*concl'd.*

down and along the Yang-ch'ang-kou, an undulating valley famous for the number of people frozen while crossing it.

The road then leads down a valley  $333^{\circ}$ , and at m. 10 runs on a bearing of  $30^{\circ}$ , over undulating country. At m.  $10\frac{3}{4}$  Shih-ch'i-hu consisting of two Tungan houses is passed. Bearing is now  $5^{\circ}$ .

At m.  $14\frac{3}{4}$  the S. gate of Urumchi is reached. The city and S. suburb have walls. There is also an E. suburb. The population of the city and suburbs is about 60,000 to 70,000, chiefly Chinese, many Tungans and some 5,000 Sarts. There is also an unwall'd settlement to the S. of the S. suburb. There is a Russian Consulate here.

## SECTION NO. 5.

FROM URUMCHI TO KU-CH'ENG (GUTCHEN), *via*  
FU-K'ANG HSIEN. (INVERSE).

123 miles.

7 stages.

*Authority.*—Lieut. W. L. Campbell, R.G.A., July and August 1903.

*Epitome.*—This is a cart road in fairly good condition without any serious obstacles. The road continues over the plain as far as Kuo-mu-ti (stage 6), then there is a gentle rise to Urumchi.

*Camping ground.*—Ample.

*Water.*—Plentiful.

*Fuel.*—Very limited.

*Fodder.*—Grazing at most stages.

*Supplies.*—Available at Fu-k'ang Hsien (stage 5) and Urumchi. Elsewhere in very limited quantities.

No. of stage and total distance.	Details.
1 CHI-MU-SA 21 m.	.. 21 m. Passing through the town and out by the W. gate, a busy suburb is traversed for 400 yds. The road continues over the prairie.



ROUTE NO. XIV. SECTION No. 5—*contd.*

The Manchu city is sighted lying S. W. of the Chinese town. The road is bordered with tall grass in places 4' high. At m. 6½ traverse Hsiao-chu'an, and at m. 10 Tachu'an. Both these are ruined villages with police posts and inns. At 14 m. enter a cultivated and wooded belt which extends to the town of Chi-mu-sa. Many irrigation canals are crossed. Chi-mu-sa is small walled town dating from 1894. There are about 200 Chinese and 50 Turki families and a garrison of 200 to 300 men (nominally 500). There are a few shops selling Russian goods.

*Supplies.*—Fair, but expensive.

2 SAN-T'AI .. .. 17 m. 4 f. The road continues through occasional patches of cultivation for the first 2½ m., when cultivation ceases and a grass prairie is traversed for the remainder of the stage. Li-shu-tien, a small village is traversed at m. 2½. At m. 8 Ssu-shih-li-yao-chan is traversed, a village in a well wooded oasis with but little cultivation. Five m. from Sant'ai the road becomes a leafy avenue, often intersected by irrigation channels which are occasionally roughly bridged with fir poles. The unbridged are easier to cross for carts than the bridged ones. The country, though well wooded, is little cultivated. Sant'ai is a straggling village with about 100 Chinese and 10 Turki families.

*Supplies.*—Scarce.

*Note.*—A road to the coal mines, in a spur of the Thian Shan called the Huang Shan, branches off here. About 600 bullock carts are employed in carrying the coal which is converted in to coke at the pit mouth.

3 SSU-SHIH-LI-CHING-TZU 13 m. 4 f. The road continues down a leafy avenue for the first five m. In spite of the abundance of water, much land lies waste. At m. 5 the road bends N. W. and traverses a gravelly waste to the end of the stage, skirting the northern slopes of the Thian Shan. The village is very small.

*Supplies.*—Scarce.

4 TZU-NI-CHU'AN .. 10 m. Cultivation recommences on leaving the village and the

52 m.



ROUTE NO. XIV. SECTION NO. 5—*contd.*

country is generally reclaimed throughout the stage. Many small streams are crossed. Tzu-ni-chu'an is a tiny village with a small garrison. The snowy Bogdo peak lies almost immediately to the S.

*Supplies.*—Scarce.

5 FU-K'ANG H'SIEN.. 23 m. Leaving the village the road at once enters

85 m.

a barren *steppe*,

sparsely covered with tall grass and tamarisk bushes. At about m. 10½ the inns of Wu-shih-li-yao-chan are passed. About m. 16 enter a cultivated belt which continues to Fu-k'ang H'sien. At m. 17½ the village of Chiu-lung-kai-tzu is traversed. There is also said to be a flat, wooden girder bridge, 50' long, crossing a dry stream, 3 m. from Fu-k'ang Hsien. This was not seen by Lieut. Campbell in 1903, but may not have been noticed owing to the fact that he passed in the dark. Fu-k'ang Hs'ien has recovered much of its former prosperity.

*Supplies.*—Limited.

6 KUO-MU-TI .. 26 m. 4 f. Leaving the town, the road is a broad

111 m. 4 f.

track allowing 2 carts

to pass, and only contracts to a single cart track at culverts over irrigation cuts. Pass through cultivation for about 5 m. Here a prairie is again met and the road curves gradually to the S. W., rounding the low terminals of the outer range of the Tian Shan, which cuts off the snow streams and prevents cultivation. At m. 16 the plain becomes broken. At m. 22 a grassy and cultivated flat, fronting the main ranges, is traversed.

Kuo-mu-ti is a fair sized village lying at the northern extremity of a wooded valley which leads to Urumchi.

*Fuel.*—Plentiful.

*Supplies.*—Fair.

7 URUMCHI .. 11 m. 4 f. The road ascends a well wooded valley to the ridge N. of

123 m.

Urumchi. The valley is generally 1½ m. broad and is watered by a fair-sized stream. The roads winds amongst trees, generally close to the stream. At about 6 m. a village is traversed and a mud camp passed. The crest is reached at m. 10, whence



ROUTE NO. XIV. SECTION No. 5—*concl'd.*

there is a gentle descent, over rolling downs, to the town, which lies buried in trees in a cup formed by the lower hills of the Thian Shan.

*Supplies*—Plentiful.

## SECTION NO. 6.

FROM KU-CH'ENG (GUTCHEN) TO HAMI (KUMUL)  
*via* CH'I-KO-CHING-TZU. (INVERSE).

261 miles.

15 stages.

*Authority*.—Lieut. W. L. Campbell, R.G.A., July and August 1903.

*Epitome*.—A cart road throughout, unmade in places but generally easy. This is an alternative route to that *via* Barkul, (*vide* Route XV and XIV-T by Tokruk and Barkul Dawan), which is generally used in Summer to avoid the heat of the southern route. The Barkul route is, however, avoided as much as possible, as the gradients on it, where it crosses the Tian Shan are very steep.

*Note*. Route XIV is continued from Hami, by two routes which lead S. E. into Kansu Province: the N. route by Aratam and Khotan-Tam to Suchow, and the more S. route by Karmukchi, Chang-lui-shun, Yen-tun, K'u-shui, and thence 141 m. to An-hsi. The section of the road from Hami to An-hsi is fit for all arms throughout, but supplies and water are so scarce that no force of any size could pass along it except in small detachments at a time. There are Government Post houses at every stage.

*Camping ground*.—Ample.

*Water*.—Scarce, generally from wells.

*Fuel*.—Obtainable in small quantities.

*Fodder*.—Obtainable in small quantities.

*Supplies*.—Very limited from stages 1 to 12, after which generally available.

No. of stage and total distance.	Details.
1 T'OU-PU .. .. 16 m. 4 f.	16 m. 4 f. General direction W. Leaving the inn in the W. suburb



ROUTE NO. XIV. SECTION No. 6—*contd.*

the road enters the Chinese town by the W. gate and passes out by the S. gate. Passing the Mohammedan town the road continues through cultivation for 2 m. when the Hami oasis ends. The remainder of this stage is over grassy prairie which is heavy going after rain or snow floods. T'ou-pu is a small village in an oasis. Time for carts 7 hrs.

*Supplies.*—Small from Hami.

2 ERH-PU .. .. 10 m. The road continues as  
———("No. 2 post.") before over the  
26 m. 4 f. prairie. Erh-pu is a  
large village, with a population of 40 Turki and from 10  
to 15 Chinese families. The little oasis is watered by a fresh  
spring.

*Water.*—From spring.

*Supplies.*—From Hami.

3 SAN-PU .. .. 10 m. Cultivation ceases  
———("No. 3 post.") beyond the village,  
37 m. 4 f. and the road con-  
tinues over a desert waste of sand and gravel which extends  
up to the Thian Shan mountains, 50 m. to the W. and  
30 m. to the N. To the S. there are rolling dunes and a  
desert which continues right across to the Kuen Lun mountains.  
At about 8 m. a stream is crossed by a wooden bridge. San-pu  
is a large village in an oasis of considerable extent. Trees and  
fields border the road.

*Supplies.*—Scarce.

4 SAN-TAO-LING .. 19½ m. Passing through the  
——— oasis the road conti-  
56 m. nues over a sandy  
waste. San-tao-ling consists of three inns and one Turki house  
which cluster round a spring of fresh water. Coal is mined  
10 m. away and salt is collected in the hollows for local use.

*Water.*—From spring.

*Supplies.*—Nil.

5 LIAO-TUN-TZU .. 25 m. The road rises gradu-  
——— ally throughout this  
81 m. stage, crossing alter-  
nate stretches of grassy prairie and gravelly desert. The road  
is generally good. At m. 3 a hut and a spring of fresh water.



ROUTE NO. XIV. SECTION No. 6—*contd.*

are passed. 3 m. from Liao-Tun-tzu a broad torrent bed is reached, covered with large boulders, over which the carts pass with some difficulty as there is no made road. Liao-tun-tzu consists of three inns, a few hovels and two small shops. There is a *likin* station, a telegraph repairing depot and a garrison of 15 mounted men.

*Water.*—From a spring feeding several small ponds.

*Supplies.*—Very scarce.

6 I-WAN-CHU'AN .. 21 m. 4 f. A heavy stage  
 ————("One bowl spring.") as the road now  
 102 m. 4 f. undulates through a  
 series of rocky watercourses. *Note.*—At about m. 3 a cross  
 road is passed, marked by a sign post, which indicates that a  
 desert track, without inns, leads to Pichan and Turfan. At  
 about m. 14 the road becomes less rocky and the *nullahs*  
 cease. The barren waste continues to I-wan-chu'an, an inn  
 and a hut by the side of a muddy puddle in which a little  
 water collects.

*Water.*—Bad.

*Supplies.*—Nil.

7 CHE-KU-LU CHU'AN 14 m. The road rises gradu-  
 ————("Cart wheel spring.") ally for the first m.  
 116 m. 4 f. The character of the  
 country then changes, the road crossing or winding round the ends  
 of a constant series of ridges running N. and S. The road runs  
 over pulverised rock and is comparatively good. The only bad  
 going is at points where the bed rock crops up. Che-lu-chu'an  
 lies in a cup formed by the meeting of the terminals of several  
 ridges. There is a good inn and two small houses.

*Water.*—From a spring, good.

*Supplies.*—Nil.

8 CH'I-KO-CHING-TZU 16 m. The road descends a  
 ————("Seven wells.") narrow gorge for the first  
 132 m. 4 f. 3½ m. then a waste arena is  
 entered. There is a shelving basin about 15 m. in diameter and  
 entirely surrounded by barren hills. The road descends gradually  
 to the bottom of this basin, which is reached at about 11½ m.,  
 and then rises gradually. For the last 3 m. there are patches  
 of tamarisk bushes, and the ground is covered with a thick



ROUTE NO. XIV. SECTION No. 6—*contd.*

white efflorescence. Ch'i-ko-ching-tzu contains one large government inn, a police office and a hut.

*Water.*—From a sandy well.

*Supplies.*—Nil.

9 T'OU-SHUI .. 20 m. Note. (?) Beyond Chi-  
 ———— ("Head water".) .. ko-ching-tzu the regular  
 152 m. 4 f. .. southern, or Thian  
 Shan-Nan-lu (Route XVI) road is left and the short road to  
 Ku-ch'eng crosses the Thian Shan at a point where the peaks  
 do not reach the perpetual snow line. This is the only cart  
 road in the range between Hami and Urumchi. Leaving the  
 inn the road continues N. W. for 1 m. to the cross roads. The  
 road now followed turns N. and, rising gradually, crosses a  
 stony waste to the Thian Shan. At about  $\frac{1}{2}$  m. a narrow  
 gully is entered, and the remainder of the stage is up narrow  
 water courses, winding over a confused mass of boulders which  
 make the road difficult for carts. T'ou-shui lies in a gorge  
 and consists of one inn.

*Water.*—From a spring.

*Supplies.*—Nil.

10 TA-SHIH-T'OU .. 14 m. The road winds on  
 ———— ("Bigstone.") .. through broader  
 166 m. 4 f. .. valleys; grass  
 plentiful. At m. 1 a hillside is ascended by a made road. Above  
 is a grassy plateau, across which the road continues from ridge  
 to ridge as far as m. 6, where the N. road, or Thian Shan-  
 Pei-lu, is struck. There is a small village and a stream at the  
 cross road. The road continues to Ta-shih-t'ou, and is marked  
 by poles to guide travellers during winter. The valleys grow  
 broader and the hills flatter farther N. There are 4 inns and  
 a military post.

*Water.*—Slightly saline, from a spring under a huge boulder.

11 SAN-KO-CH'UAN .. 26 m. 4 f. The road leads W.  
 ———— ("Three springs.") .. through broadening  
 193 m. .. valleys. At m. 6 the  
 hills are left and the plain entered. A sign post is passed, at  
 which there is a cross road leading to Barkul and Hami (*vide* first  
 paragraph of epitome). The road continues over the plain to  
 San-ko-chu'an-tzu, the remains of a once considerable village



ROUTE NO. XIV. SECTION No. 6—*contd.*

lying in a depression in the plain. There are three inns and a military post.

*Water.*—From a well.

*Supplies.*—Nil.

12 MU-LEI-T'ANG .. 21 m. 4 f. Rising out of the hollow, the road leads over the plain.

214 m. 4 f.

Many depressions are crossed, of which the E. sides are always steep and the W. sides gentle. Water is found in these hollows and there are remains of former cultivation with occasional ruins. At about m. 15 the village of Tzu-ni-chu'an is traversed, a small place with bad water. The road continues to Mu-lei-t'ang, a large village with many ruins. There are about 200 Chinese men and 20 Turki families. There are a number of Turki shops, where boot, cloth, and various Russian small wares can be purchased. There is a small garrison under a *Shou Pei* and a minor civil official.

*Supplies.*—Fair.

13 CHI-T'AI-HSIEN .. 21 m. 4 f. The road passes through the village and crosses the Mu-lei Ho

236 m.

canal by a wooden bridge and then, after crossing a rise, the Mu-lei Ho main river bed, which is 400 yds. wide. In July 1903 there was no water, but in the end of June 1886 there was a stream 40 yds. wide and 1' deep. The road continues over grassy, rolling downs to Yao-tien, a small village at m. 10. Beyond this the prairie extends to Hsi-chi'rh, a large village at m. 16, where there is a belt of cultivation extending to Chi-t'ai-Hsien. The road is much cut up by small irrigation channels which cross it in many places. Farms are numerous in the cultivated areas.

*Supplies.*—Plentiful.

14 SSU-SHIH-LI-YAO-TIEN 11 m. 4 f. Passing through the suburb, the road continues over the

247 m. 4 f.

plain, where much arable land lies fallow. Patches of cultivation occur. Ssu-shih-li-yao-tien is a small village and only a half-way stopping place, as all Chinese travellers make Ku-ch'eng in one stage.

*Supplies.*—From Ku-ch'eng.



ROUTE NO. XIV. SECTION NO. 6.—*cncl'd.*

15 KU-CH'ENG .. 13 m. 4 f. A good level stage  
 over the plain which  
 261 m. is gradually being  
 reclaimed by the agricultural population wherever there is  
 water for irrigation. Passing through a busy suburb the town  
 is entered.

*Supplies.*—Of all kinds, plentiful.

## ROUTE NO. XV.

FROM KU-CH'ENG TO BAI (KANSU BORDER).

In 2 sections as under :—

	<i>Miles.</i>	<i>Stages.</i>
1. From Kucheng to Barkul ..	268½	11
2. Barkul, <i>via</i> Aturuk to Bai ..	128	6
Total ..	396½	17

## SECTION NO. 1.

FROM KU-CH'ENG TO BARKUL.

268 miles.

11 stages.

*Authority.*—Chinese Gazetteer of Hsien Chiang.

*Epitome.*—This is a cart road. Details unknown. Stages  
 are those given in Chinese Gazetteer. *Note.*—From Barkul  
 two routes lead N. E. into Mongolia.

*Camping ground.*—Ample.

*Water.*—Available.

*Fuel.*—

*Fodder.*—

*Supplies.*—

} No information, limited quantities.



ROUTE NO. XV. SECTION No. 1—*contd.*

No. of stage and total distance.	Details.	
1	SSU-SHIH-LI-YAO ..	13 m. 4 f.
13 m. 4 f.	2	CHI-T'AI-HSIEN .. 11 m. 4 f.
25 m.	3	MU-LEI-T'ANG .. 21 m. 4 f.
46 m. 4 f.	4	A-K'E-T'A-SSU .. 30 m.
76 m. 4 f.	5	WU-LAN-WUSU .. 30 m.
106 m. 4 f.	6	SE-PI-T'ANG .. 20 m.
126 m. 4 f.	7	KA-SHUN-T'ANG .. 27 m.
153 m. 4 f.	8	WU-T'U-SHUI .. 30 m.
183 m. 4 f.	9	CHIN-PA-CH'UAN .. 25 m.
208 m. 4 f.	10	SU-CHI-T'ANG .. 30 m.
238 m. 4 f.	11	BARKUL .. .. 30 m.
268 m. 4 f.		

Vide Route  
XIV, Part 6.



## ROUTE NO. XV.

## SECTION NO. (2).

FROM BARKUL TO BAI.

128 miles.

6 stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.	
1	KOU-SSU ..	.. 22 m. E. by S. past Manchu ruined town. Grassy plain with scattered
22 m. cultivation. Kou-ssu.		
2	SHOR BULAK ..	.. 19 m. via Hsin-hsiang-tzu, abundant grass.
41 m.		
3	NARIM-KUR ..	.. 9 m. W. via Tala Bulak.
50 m.		
4	TURGAN-GOI ..	.. 30 m. S. E. by Kurwaz-Choki, stone Sai, S. of Torkul, to Turgan-
6,860. 80 m. goi.		
5	ATURUK ..	.. 18 m. E. by Kara-Singer and Urge. Cultivation round Aturuk.
98 m.		
6	BAI ..	.. 30 m. (?) E. by Kunluk. Cultivation at Bai.
128 m.		

*Note.*—From Bai a track leads S. and apparently joins the northern of the two routes from Hami mentioned in epitome to Route XIV.



## ROUTE NO. XVI.

FROM TOKSUN TO CH'IKO-CHING-TZU (Route XIV  
Section 6, stage 8) *via* TURFAN AND PICHAN.

33 miles.

1 stage.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—This is apparently a cart road all the way. When reported on it will probably be found to be a main through route between Toksun and Hami.

No. of stage  
and total  
distance.

Details.

1	TURFAN ..	.. 33 m.	The road crosses the Ta-pan Ho (Algoi R.) by a wooden bridge outside the town and then leads across a prairie. At m. 20 a village of some size is passed. The road leads N. E. to Turfan. The Chinese town of Turfan lies 2 m. E. of the Turki town.
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*Supplies.*—Very limited.

*Note.*—From Turfan, direction is E. *via* Yarkhoto, Lukchun, Pichan, Chiktam, to Ch'i-Ko-Ching-tzu. Pichan is 27 m. N. E. of Lukchun, and about 90 m. S. E. of Ch'i-Ko-Ching-tzu, Pichan and Chiktam are cultivated areas.

## ROUTE NO. XVI (A).

FROM TURFAN TO HOUKOU.

50 miles.

3 stages.

*Authority.*—Major G. Pereira, February 1912.

*Epitome.*—Route XIV, Section 4, stage 2, can be reached by a road from Turfan. Joining 10 $\frac{3}{4}$  m N. of Pacha-Saighan, just short of Hou-kou.



ROUTE NO. XVI A.—*contd.*

No. of stage and total distance.	Details.
1 KENG-KENG	.. 15 m. Leave Turki town and traverse the fertile oasis. At m. 5 leave the oasis and descend gradually to a wide loess gully, 100 ft. deep in which a stream flows. Follow this for $2\frac{1}{2}$ m. then ascend to a plain. This rises gradually to the top of ridge where there is a descent to a gully in which a little stream is crossed.
15 m.	
2 SAN-KO-CH'UAN-TZU	16 m. 4 f. At 8 m. cross a bridge. At m. 13 pass ruins. The road ascends gradually. Several springs are seen on the hills to the N.
31 m. 4 f.	
3 HO-GULU OR HOU-KOU	18 m. 4 f. Ascend a long desolate valley in the foot hills. Then climb a low ridge of slate. At m. 10 pass Pai-yang-ho. A tiny place with an inn and a few huts. Water from a spring.
50 m.	
Close to this the route from Toksun (XIV) is joined.	

## ROUTE NO. XVI (B).

FROM CHIKTAM TO SAN-KO-CH'UAN *via* TAM  
BULAK.

62 miles.

4 stages.

*Authority.*—Map of Sir A. Stein's Explorations in Chinese Turkistan and Kansu.

*No details.*



## FOR NOTES.



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FOR NOTES.

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FOR NOTES.

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MINOR THROUGH ROUTES!



## MINOR THROUGH ROUTES.

## ROUTE NO. 1.

FROM GIRCHA TO AK JILGA ON THE DAFDAR—  
SOKH BULAK ROAD [ROUTE I.A. (1)], *via* Khungerab  
Pass (*vide* stage 5 of route 11-K of Routes in Chitral,  
Gilgit and Kohistan).

*miles.*

*stages.*

*Authority.*—

*Epitome.*—The route is impracticable from 1st June to  
1st October when the Kungerab River is unfordable, and in the  
winter fresh and soft snow may prevent the Khungerab Pass  
being crossed by animals. There is no regular traffic along  
the route at any time of the year.

## ROUTE NO. 2.

FROM HUNZA TO SHAHIDULLA *via* THE SHIMSHAL  
PASS. (INVERSE).

$270\frac{3}{4}$  *miles.*

*21 stages.*

*Authority.*—Captain Younghusband, 1887 and 1889;  
Cocherell (?) 1892; In stages 9—15,  
*cf.* Routes in W. Himalaya and Kashmir,  
Vol. I, Route 97, Stages 9—4.

*Epitome.*—The road is, as a rule, practicable for pack ani-  
mals, but is impossible during the summer months up till the  
end of August, on account of the depth of the Yarkand River.  
Between Shahidulla and Tar wheeled artillery could traverse  
the road.

*Camping grounds.*—Limited to a battalion at most stages.

*Water.*—Fairly plentiful.

*Fuel.*—Scarce.

*Supplies.*—Nil.

No. of stage  
and total  
distance.

Details.

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1	TAR	..	14 m. 4 f.	Leaving Shahidulla,
				ascend open, pebbly valley,
14 m. 4	.			400—600 yds. broad.

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ROUTE NO. 2--*contd.*

Stream  $2\frac{1}{2}$ ' deep, 15 yds. wide. Kalchuskun, a plain covered with efflorescence and grass, is passed about half way and also Kirchin Jilga, where there is grass and brushwood. Elevation 13,492'.

*Grazing.*—Plentiful and good.

*Fuel.*—Scarce but obtainable.

2 KHIRGHIZ JANGAL 22 m. Road bad for  $1\frac{1}{2}$  miles, after which it is good up to the Sokh Bulak pass and bad again to the Yarkand river. Grass and fuel very scarce on the road but obtainable in small quantities in a ravine leading down to the Yarkand river and in plenty at Kirghiz Jangal. Leaving Tar the road goes up the valley, here only 300 yds. broad, bounded by rocky mountains. At  $1\frac{1}{2}$  m. leave stony bed of stream and keep along the smooth marshy side of the hill (left bank) for 1 m. Cross the Kuksin and another stream. At  $4\frac{1}{2}$  m. is the junction of the Sokh Bulak stream up which is a road to Raskam.

The Kalchuskun stream here flows over a pebbly bed 250-300 yds. wide. At Sokh Bulak c. g. grass is plentiful; no fuel. The road is now good over an earth and gravel slope on the left bank of the stream. Descend gradually into the bed of the stream. The bed of the Kalchuskun stream is left about 2 m. further on and the Sokh Bulak pass (17,093') is reached by an ascent up a ravine  $\frac{3}{4}$  m. beyond. Ascent is gradual and easy; descent very steep for about 600 yds. down the side of the mountain to the bed of a *nullah*. The road now descends for 8 m. to its junction with the Yarkand river, the bed of the *nullah* is covered with debris and boulders, and the going is difficult. The pebbly bed of the river here is 600 yds. wide, the river is 30 yds. wide, 3' deep, and is crossed twice. At Kirghiz Jangal the bed of the river is  $\frac{3}{4}$  m. wide. Elevation 12,286'. Captain Younghusband was 10 hours and 50 minutes in traversing this stage.

*Fuel.*—Plentiful.

*Grazing.*—Good.

3 KULANULDI ..11 m. The road is good, following down the bed of the Yarkand river, which is crossed at 4 m., depth  $2\frac{1}{2}$ '. Fuel plentiful the whole way. Grass is found at Sasbulak (8 m.) and at Kulanuldi valley.



ROUTE NO. 2—*contd.*

Lower part of mountain sides shingle, slopes higher up rocky precipices. Elevation 12,637'.

4 CHIRAGH SALDI ..18 m. Continue down the pebbly bed of the Yarkand river, from  $\frac{3}{4}$  to 1 m. 65 m. 4 f. broad, crossing it 10 times, depth  $2\frac{1}{2}'$ . At 6 m. the c. g. of Tokanak, to which Route 13, stage 9, comes in from Yarkand *via* the Yangi Pass. At  $10\frac{1}{4}$  m. is a patch of good grass called the Bulak Bashi, and a mile beyond this the Kanbaskan stream, 15 yds. wide,  $1-1\frac{1}{2}'$  deep, flows in from the South.

*Fuel and grazing.*—Plentiful.

NOTE.—ROUTE 2-A. From CHIRAGH SALDI to the YANGI PASS, there is a road hence over the Chiragh Saldi pass, joining Route No. 13 at the N. foot of the Yangi Pass.

5 IGAR SALDI ..13 m. Still down the valley. At  $2\frac{1}{4}$  m. a stream from the N. is crossed. 78 m. 4 f. Note.—At  $6\frac{1}{2}$  m. another stream from the N., up which a difficult track leads to Pakhapu. Beyond this the road crosses over the end of a spur running down from the N., and at 8 m. ascends on to a fine patch of grass and jungle called Urdok Saldi.

At  $10\frac{1}{2}$  m. cross a plain with remains of houses on it, formerly occupied by Kirghiz, called Karashtarim,  $3\frac{1}{4}$  m. long by 600 yds. broad. At  $12\frac{1}{2}$  m. a path leads by steep zig-zags over a spur to Igar Saldi. This path is only practicable for people on foot, and ponies have to be taken round the spur for a mile, crossing the river twice.

*Camping ground.*—In a gorge, the valley having narrowed to a width of 300—400 yds. with lofty, precipitous sides.

*Fuel and Grass.*—Plentiful.

6 SURUKWAT ..11 m. Continue down the valley. On leaving camp the river has to be crossed four times to round a cliff extending to  $3\frac{3}{4}$  m. 89 m. 4 f.

At  $1\frac{1}{2}$  m. the Bazar Dara stream, 20 yds. wide by  $1\frac{1}{2}'$  deep flows in from the N. and at the junction there is a fine patch of grass and jungle known as Ush-Dawa. From Ush-Dawa ponies have to follow the Yarkand river, crossing and recrossing it several times, but a path, practicable for people on foot, leads



ROUTE NO. 2—*contd.*

over a spur, saving about 2 m. At 10 m. is the Mohammad Khoja gorge, wher in the valley contracts and the river flows between precipitions cliffs. In September 1889 the river was up to the ponies' backs and flowing so rapidly that it was impossible for them to cross loaded, and the baggage had to be taken over on camels. On September 21st, 1887, Captain Younghusband crossed with ponies but with some difficulty, and at one place had to make a path round a cliff. At  $\frac{1}{2}$  m. beyond the gorge, the Surukwat stream joins in from the S. There is a c. g. called Kul, on the Yarkand r., where there is good grass and high jungle. A few hundred yds. up, the Surukwat c. g. This march is a trying one owing to the depth of the Yarkand river. By the beginning of October when the waters have fallen there is no difficulty in crossing. Elevation 11,316'.

NOTE.—Route 2 B.—From Surukwat to the valley of the Tiznaf River. Up the Bazar Dara, road leads over the pass into the valley of the Kulan-Urgi river and from thence, over the Takhat Kuram Pass, into the valley of the Tiznaf river.

7 AGHIL BOHOR ..12 m. 6 f. The road is good enough for  $10\frac{1}{2}$  m. 102 m. 2 f. up the pebbly bed of the Surukwat and Aghil Pass streams, and bad after this. Grass and fuel plentiful for 5 m., afterwards scarce; fuel can be found here and there the whole way. Ascend the Surukwat stream for  $2\frac{1}{2}$  m. till it bifurcates, then ascend the Western Branch. At  $4\frac{1}{2}$  m. there is a c. g. with plenty of grass and fuel. At 9 m. there is a stream, 12 yds. wide and 9" to a foot deep, which joins in from the W. and at  $1\frac{1}{2}$  m. beyond this the Aghil pass stream flows through 2 narrow gorges. It is possible to take both ponies and camels through these gorges, but a rough, steep pathway exists up to the right bank of the stream. The first gorge is 150 yds. long and the 2nd 250 yds. Both are narrow, in places only 5 yds. wide. Beyond the gorges the road is very bad, leading up the bed of the stream, which is here covered with big boulders for  $1\frac{1}{4}$  m., and afterwards ascending the right bank.

*Camping ground.*—In a small plain on the right bank of the Aghil Pass stream.

*Fuel and Grass.*—Fairly plentiful.



ROUTE NO. 2—*contd.*

## 8 SHAKSGAM

..11 m. 4 f. Road fairly good,  
leave Aghil Bohor,  
ascending the Aghil

113 m. 6 f.

Pass stream and passing for 1 m. over a plain, 400 yds. wide. At  $1\frac{1}{4}$  m. a stream comes down from the W. through a valley,  $\frac{1}{2}$  m. wide and about 6—8 m. long. At  $3\frac{1}{2}$  m. pass ruins of a hut near a patch of very good grass. The ascent is now very easy and gradual over the long slopes leading from the eastern range. Grass is plentiful, fuel scarce. At  $6\frac{1}{2}$  m. reach the summit of the pass, where there is a small lake  $\frac{1}{2}$  m. in length (15,266'). Descend down a ravine covered with boulders, rather difficult.

*Camp.*—On the right bank of the Oprang (Mustagh?) river.

*Fuel.*—Scarce.

*Grazing.*—Good.

*NOTE.*—Route 3 (1). From Shaks gam to the Urdok Glacier (Saltoro Pass) 33 m. 3 stages. Cf. Route 100 of Routes in W. Himalaya, Kashmir, etc., Vol. I.

This Route is impracticable for military purposes and possibly for civil on account of glaciers. Ascend pebbly bed of Oprang river from  $\frac{1}{2}$  to  $\frac{3}{4}$  m. broad. At 2 m. a small patch of grass, a mile to the left called Kulan Jilga. At 7 m. a fine patch of grass and jungle, Durbin Jangal. Beyond here no brushwood is obtainable. At  $\frac{3}{4}$  m. further on, a stream 15—20 yds. wide, depth 1', flows in on the right bank. Cross the Oprang three times, 2' deep and divided into many channels. At 13 m. is Gusherbrun Jilga c. g. on the right bank. Small amount of low scrub near which serves for grass and fuel.

Leaving this camp the first 5 m. of road is good: the Oprang has to be crossed several times. Being a glacier river it varies in depth with the time of day. Ascend the moraine of the Urdok glacier, going fair for 2 m., and afterwards bad. Scrub is found at the end of glacier. The breadth of the glacier at the end is 1,000 yds. Camp at 24 m. from Shaks gam.

Ascend the glacier, going very bad. No grass or fuel. The pass is so steep and difficult as to be impracticable for any except practised mountaineers. Camp at 33 m. from Shaks gam. Time taken by Captain Younghusband in traversing the last 3 marches was  $8\frac{1}{2}$  hrs.,  $8\frac{1}{2}$  hrs. and  $7\frac{1}{2}$  hrs. respectively.

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## ROUTE NO. 2—contd.

9 SARPOLAGGO ..18 m. Descend the valley of the Oprang river; bed  $\frac{1}{2}$  to  $\frac{2}{3}$  m. broad, crossing it 6 times. Width of river 20—30 yds. Depth  $2\frac{1}{2}'$  to  $3'$ . Mountain sides, rocky and precipitous. Camp on the left bank of the Sarpolaggo stream, up which lies the route by Suget Jangal to the Mustagh Pass. (Route 3).

Fuel.—Scarce.

Grass.—Scarce.

10 KARATAGH BULAK  $12\frac{1}{2}$  m. Follow down the valley of the Oprang crossing the river many times. Width 30—40 yds. depth very variable often unfordable. Valley  $\frac{3}{4}$  m. wide.

At 6 m. on the left bank are some remarkable waterfalls and near them are patches of good grass. This is the best camp on the route and is much frequented by the *Kanjutis*.

Fuel.—Plentiful.

Grazing.—Good.

11 YAIPAKTASH ..13 m. 2 f. Cross the river 9 times.

Elevation.—10,523'.  
157 m. 4 f.

Fuel.—Plentiful.

Grazing.—Nil.

12 AFDIGAR ..12 m. Road good. Cross river 7 times, depth  $3-3\frac{1}{2}'$ , current rapid.

At  $3\frac{1}{2}$  m. pass Shimshal Aksai (Route No. I. A). Grass and fuel plentiful. The road now leaves the Oprang valley and ascends the right bank of the Afdigar stream for 3 m., when it descends by a zig-zag to the bottom of a ravine, on the opposite side of which is a *Kanjuti outpost*, consisting of 2 towers, connected by a wall, which completely blocks the way; this is usually known to the Kirghiz as the *Darwaza*. Beyond this cross several small *nullahs* at which there are small walls for defence.

Fuel and Grass.—Plentiful.



ROUTE NO. 2—*contd.*

13 SHUIJERAB ..14 m. 4 f. The track from camp  
 ——— Elevation 13,429' lies up the valley where  
 184 m. the Afdigar stream is  
 left. Then there is a steep but not difficult ascent by  
 a zig-zag for  $1\frac{1}{2}$  m. and on up to the Shimshal Pass.  
 One m. from the summit is a small summer village  
 called Chikor (5 houses). The ascent is gradual. On the  
 summit there are 2 lakes. Descent gradual. Approaching  
 camp there is a steep descent to the bed of the Tang stream  
 Winter road (*Note.* For summer road see Routes in W. Him. and  
 Kashmir, Vol. I., R. 97, St. 3). Shuijerab is an unoccupied  
 village of 20 houses, on the bank of the Tang stream, which rises,  
 about 2 m. above the hamlet, in a glacier.

*Fuel.*—Nil except dung.

*Grazing.*—Fair.

*Supplies.*—Nil.

*Note.* Route 11 (*h*) of *Routes in Chitral, Gilgit and Kohistan*  
*describes the Route from here onwards, but description differs*  
*completely from that shown here, therefore this is also given.*

14 PHURZIN-I-GASHT 14 m. At 7 m. there is a steep  
 ——— nullah, very difficult  
 198 m. for laden animals. In  
 the bed is Shira Kachit, consisting of a few dilapidated stone huts.  
 The path lies over open slopes, the track for men is scaffolded  
 with a vertical spiral staircase, 30' in height. Horses are  
 led by a somewhat circuitous path, with many severe ups and  
 downs at a very trying gradient. There is a stiff descent of about  
 1,000'. Cross the stream by a good bridge  $18 \times 4'$ . Here a  
 track for cattle joins in. Ascend from the bed of a side stream  
 over slipping shingle, fragile cornices, and awkward staircases,  
 and descend the cliff on right bank by a very steep and try-  
 ing path. Cross the stream 3 times in 1 m.

*Camp.*—In the stony bed of the river. Elevation 11,637'.

*Fuel.*—Scarce.

15 SHIMSHAL (SHING- 10 m. At  $3\frac{1}{2}$  m. cross the  
 ——— SHAL). Thin Kuik, a warm  
 208 m. sulphur stream, at the  
 mouth of which is a good deal of coarse grass and some jungle.  
 For a mile proceed through gorge, 60 yds. wide; for 2 m. proceed



ROUTE NO. 2—*concl'd.*

along the bed of the Tang *nullah*, fording the stream a dozen times. At 6 m. ascend abruptly from the bed of the Tang *nullah*, 15 yds. wide and choked with boulders. Follow a very difficult path along the cliff's edge, over staircases and cornices, with frequent steep ascents and descents, quite impracticable for animals and difficult even for laden coolies. Go down over a spur from the Gharasar peak, which separates the valley of the Shimshal from that of the Tang river. Ford the main stream just above the junction of the Tang river and the Shimshal river. At 9 m. these rivers join. The path goes over spurs from the Shimshal Pir and crosses the Chukwin, Shashmarg, Tokmak, and Zargabin passes and lies on the right bank of the Zargabin *nullah*. The road goes for 4 m. along the river bed which is easy.

*Fuel.*—From the Kutdur-i-Dasht.

*Grass.*—Fairly plentiful.

*Supplies.*—Obtainable.

16	LANGAR	.. 14 m.	} <i>Vide</i> Route 11 ( <i>h</i> ), Routes in Chitral, Gilgit and Kohis- tan.
222 m.			
17	DIKUT	.. 10 m.	} <i>Vide</i> Route 11 of Routes in Chitral, Gilgit and Kohistan.
231 m.			
18	PASU	.. 14 m.	} <i>Vide</i> Route 11 of Routes in Chitral, Gilgit and Kohistan.
241 m. 4 f.			
19	GULMIT	.. 8 m. 4 f.	} See also Routes in the Western Hima- laya, Kashmir, etc., Vol. I., Punch, Kash- mir, and Ladakh, Route 97. (Trig. Survey, Dehra Dun) 1922.
250 m.			
20	ATABAD	.. 11½ m.	} See also Routes in the Western Hima- laya, Kashmir, etc., Vol. I., Punch, Kash- mir, and Ladakh, Route 97. (Trig. Survey, Dehra Dun) 1922.
261½ m.			
21	HUNZA	.. 9 m.	} See also Routes in the Western Hima- laya, Kashmir, etc., Vol. I., Punch, Kash- mir, and Ladakh, Route 97. (Trig. Survey, Dehra Dun) 1922.
270½ m.			



## ROUTE NO. 3.

FROM ASKOLE TO SUGET JANGAL (ROUTE 2  
STAGE 9) *via* MUSTAGH PASS. (INVERSE.)

92 miles.

10 stages.

*Authority.*—Captain Younghusband, 1888.

*Cf.* ROUTE 98 OF ROUTES IN W. HIMALAYA, KASHMIR,  
ETC., VOL. I.

*Note.*—Captain Younghusband's report contained in Route 11 *note* of the 1913 edition of this route book is superseded in accuracy for present day conditions by Route 98 of Routes in W. Himalaya and Kashmir, Vol. I.

*Epitome.*—This road is now disused and quite impracticable for military purposes. For 3 marches the path ascends the glacier; at the upper end there are two passes leading over the Mustagh range. The eastern of these is practicable with extreme difficulty for foot passengers; the western is at times impracticable on account of a difficult glacial condition see R. 99 Routes in W. Himalaya and Kashmir, Vol. I., Route 98. This route is considerably shorter than that by the Karakoram pass but is not used on account of the difficulty in crossing the Yarkand river and of the Mustagh Pass. It is possible that, after the lapse of years, the glacier, which makes the pass so difficult, may become easier, but the river will always be a serious obstacle till October, in which month the pass becomes closed.

*Camping grounds.*—No information.

*Water.*—Plentiful.

*Fuel.*—Scarce.

*Fodder.*—Scarce.

*Supplies.*—Nil.



## ROUTE NO. 4.

FROM TASH KURGHAN TO MUK [AND KOKSAI  
PASS (RUSSIAN PAMIRS)] *via* BULUNKUL.

In 2 Sections as under :—

## SEC. 1. FROM TASHKURGHAN TO BULUNKUL.

Miles.	Stages.
67 $\frac{3}{4}$ m.	4

## SEC. 2. FROM BULUNKUL TO MUK.

87 m.	5
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Total	154 m.	9
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*Authority.*—Captain A. Samud Shah, 1921, as far as Bulunkul; remainder: N. Fitzmaurice, 1920; last stage to Kashgar, Lt.-Colonel P. T. Etherton, 1921.

*Note.*—The notes as far as Bulunkul were based on conditions actually prevailing in October 1921. In other seasons for climatic reasons, and possible repairs by local authorities, the state and alignment of the track may be different, particularly at stage 4 (Bulunkul) where the lakes Karakul and Basik are met and the defile Uzun Tal is traversed.

*Epitome.*—Passable for pack transport throughout, but very rough in the Kizil Art Su gorge, and loads must be lightened between Muk and Birtakai. [*Vide* Route XIII (a) of Routes in Russian Central Asia].

*Camping grounds.*—Everywhere available.

*Water.*—Plentiful.

*Fuel.*—Scarce.

*Fodder.*—Good grazing in summer except between Muk and Birtakai.

*Supplies.*—Nil, except sheep from Kirghiz.



ROUTE NO. 4—*contd.*

## SEC. 1—FROM TASHKURGHAN TO BULUNKUL.

No. of stage and total distance.	Details.
1 TAGHARMA 14½ m.	<p>..14½ m. The path runs due N. along the left bank of the river through a fertile country and grazing lands. At m. 2 Teznif (about 20 houses inhabitants Maulais). At m. 5½ Chashman (about 12 houses inhabitants Maulais). Shortly after Chashman the path to Darshart (<i>vide</i> Route No. I, stage No. 7) turns to the E. while the path to Bulunkul and Gez runs N. and for about 5 m. goes now on the right bank and then on the left bank of the Tagharma stream, on both sides of which there are patches of good grazing. Soon after Chashman the valley gradually narrows, culminating in a defile at about 5th m. Fording the stream at the mouth of the defile—1½ ft. of water in October 1921—a very extensive open country is entered resembling a vast amphitheatre, by reason of mountains surrounding it with the snow capped Muztagh on the N. On entrance to this extensive open country, the area in front, wherein are situated about a dozen hamlets, is locally called Baghaul and native inhabitants say that at a distance of 7 m. from here there is a hot spring in the hills opposite. The low levels of this enormous amphitheatre are swampy but afford grazing for at least 1,000 animals, though local people say that the grass effects the teeth and throat of all animals alike specially in spring and autumn. This probably is the case when there is continued grazing for some time. It is also said that human beings too are similarly effected though in a lesser degree by drinking the water from the stream. Besh Kurghan, at the foot of the hills, a little to the E. of Muztagh, but situated within the amphitheatre, is a hamlet of 5 huts. From the mouth of the defile, above mentioned, to Tagharma the distance is about 6 m. Tagharma contains some 15 houses, all Maulais. A short distance S. E. of it is a small quadrangle enclosing 4 <i>Khingahs</i> sheltering 20 mounted Chinese soldiers. A few hundred yds. S. W. of Tagharma is a hamlet where lives</p>



ROUTE NO. 4—*contd.*

an Andijani mullah. For an army from N. or S. it would be absolute hell marching across this vast amphitheatre if guns are positioned in the surrounding hills to oppose it.

*Camping grounds.*—Ample for a Division and more.

*Water.*—For a brigade at Tagharma itself; for a large force from the stream at some distance.

*Fuel.*—Very scarce.

*Fodder.*—Ample grazing.

*Supplies.*—Nil, except meat which is procurable in plenty.

## 2 KARASU

..17½ m. For about 3 m. path leads up, by a very gentle rise, to the

32 m.

lower side of the amphitheatre; then descending almost imperceptibly still in same direction, goes for about 1¼ m., then crosses bed of dry *nullah* (October) and passes a stream of clear water and a mill. Then for some 4½ m. track skirts the same (low) side of amphitheatre and after going over 2 patches of rough and stony ground (first one just-short of a mile in length, but neither difficult for wheeled units) and crossing a small stream (October) passes opposite Gidjek Post, which was in 1921 abandoned by Chinese but the site of it can still be seen. There is good grazing round about here and also water from stream. When travelled in October 1921 a succession of severe hail storms followed almost immediately by blinding dust clouds, whirlwinds, and strong penetrating winds, passed over this locality and natives stated that such disturbances are not uncommon in the late autumn or early winter in these parts. Just beyond Gidjek, for a few hundred yards, track requires improving for wheels and again about a furlong further on. Thence path turns towards and keeps to the foot of hills, on left, and after about 3 m. becomes boulder-strewn and rough, requiring improvement at places, and sharp turns for passage of wheeled units. Then enters dry bed of a stream (which flows according to local information, in spring and summer, but is fordable then) and keeps to it for about 2 f. A mile and a ½ further on a hillock is crossed which wants some attention before wheels can get over it. For about 1¼ m. after this, track becomes stony and winding through hills, enters at Kerkechki (name of an uninhabited locality), a broad easy plain which leads up to Karasu at 3 m. from its commencement.



ROUTE NO. 4—*contd.*

*Camping ground.*—For a brigade.

*Water.*—Plenty.

*Fuel.*—Scarce.

*Fodder.*—Fairly good grazing.

*Supplies.*—Nil except meat in abundance.

3 SUBASHI KARAU 15 $\frac{3}{4}$  m. At 1 f. cross dry *nullah*  
(water in spring, but  
fordable) and after a  
47 $\frac{3}{4}$  m. short distance turn towards foot of hills. At about 1 $\frac{1}{2}$  m.  
further on rise to a level space which is about 1 $\frac{1}{2}$  f. in extent  
and would require improving at places. Then with exception  
of first 200 yds. which would be the better for improvement,  
track is good and easy for about a m. and then becomes stony  
again for a short distance where some attention would be  
useful for wheels. Then again except for occasional patches  
of rough ground, which are however passable for wheels, track  
continues easy for about a m. at the end of which the top of  
Ulugh Rabat Pass is reached. This pass is easier than most.  
From the top an extensive plain is presented to view. The  
descent, which is about a m. long, is fairly sharp but fit for  
laden animals and wheels, though some slight improvement at its  
commencement and end would be better perhaps. Soon after  
descent begins, a foot path branches off from track and goes over  
a spur on right, at the foot of which, on the other side, there  
is a fresh water spring according to natives. At about 1 $\frac{1}{4}$  m.  
from foot of pass a batch of  $\frac{1}{2}$  dozen dome like structures, col-  
lectively called Irighiyak Gumbad, is met situated at a short  
distance on left of track. From here to Subashi Karaul it is  
some 7 m. and is a good easy stretch although dry stony *nullahs*  
are crossed four or five times. These flow in spring but are  
fordable. Just about a mile from Subashi Karaul there is a bit  
of swampy ground, some 60 yds. wide, where laden animals  
and wheels would require careful steering. If space for camping  
ground be no consideration, Subashi Karaul is a better place  
for encampment than the Kirghiz village Subashi itself, which  
is the usual stage and which is about a mile shorter, as Subashi  
Karaul is on higher ground and therefore drier and is more  
protected from the prevailing strong winds which are anything  
but comfortable when they blow: and the water at Subashi  
Karaul is cleaner than at Subashi which is surrounded by grassy  
and boggy ground. It is for these reasons probably that the  
Chinese have selected Subashi Karaul for having a post of 15



ROUTE NO. 4—*contd.*

men. *Route 5 stage 9 comes in here.*

*Camping ground.*—At Subashi Karaul for a brigade, though Subashi (or a few hundred yds. short of it) can easily accommodate a division or more. At both places, fuel very scarce, a little grass for grazing, water plenty, meat supply in abundance but nothing else.

## 4 BULUNKUL

..20 m. At about  $1\frac{3}{4}$  m. enter enormous flat plain which stretches for some

$67\frac{3}{4}$  m.

$1\frac{3}{4}$  m. (and which can be used as a camping ground for a division if it is desired to extend the previous march to Subashi Karaul by  $1\frac{3}{4}$  m.) and touches the southern shore of Karakul lake. When skirting the cliffs on the southwest edge of the lake, round which track leads, some improvement would be necessary for passage of wheels. In October 1921 the ground hereabouts was hard and the water in the depressions was frozen but in spring and summer this place would probably be swampy. A little further on six domed huts are met which are collectively known as Karakul Gumbad and which are, it is said, Kirghiz tombs. At about 200 yds. beyond these tombs the lake had actually to be entered as its fringe touched the cliffs, but the water being frozen hard there was no difficulty for camel and pony transport in getting across dryshod. Beyond this spot the track follows almost the edge of the lake for about a m., after which it leads away from it but returns close to it some  $\frac{1}{2}$  m. further on. In this short interval some slight improvements would be required for wheels as track enters stony ground and twists awkwardly round mounds. Shortly after, track again recedes from the lake but keeps near its backwaters for  $1\frac{1}{2}$  f. then by a short easy ascent enters rough ground once more and zig-zags round mounds (where improvements for wheels necessary) for about  $2\frac{1}{2}$  f., then descends gently to edge of the Basik lake, following it for a brief space, crosses a stream (an overflow of the lake), gets into a swampy patch, not more than 50 yds. wide, traverses stony and undulating ground (which for wheels, would be better by slightly improving) and after about  $3\frac{3}{4}$  m. enters the plain called Qyun Tala (or the plain of the hare) which is fully a mile long—*just before entering this plain track bifurcates, the one to the left leads to the plain, the right one goes over more stony ground and finally the two meet at the crossing of the river.* This track leads through a dry nullah (October) about 2 f. in length. Wheels cannot



ROUTE NO. 4—*contd.*

pass through the *nullah* without improvement. From *nullah* track emerges into open ground slightly sloping, and after about 2 f. reaches the Gez river (which is here popularly called TurBulung) and crosses to the right bank by fording it—about  $1\frac{1}{2}$ ' of water in October 1921. After crossing the Gez, track lies through defile called Uzun Tal (or the long maidan). For about a m. the going is good but after that, when the river is approached but not crossed, a distance of about 400 yds. is unfit for passage of wheeled units. Beyond that the river is recrossed and some 50 yds. further recrossed back to right bank. At about a mile further on another crossing and recrossing takes place, after which, though defile widens considerably track gets very stony and rough and wheels would not get over it without improvement. Then for  $1\frac{3}{4}$  m. to Uzun Tal Gumbad (2 domed huts) track is easy for all arms—good grazing in vicinity of Uzun Tal Gumbad. A short distance beyond this spot repairs would be necessary for wheels.  $2\frac{3}{4}$  m. further on pass Jur Kapa, a Kirghiz encampment. Thence it is about  $1\frac{1}{2}$  m. to Bulunkul and track not difficult though slight improvement here and there would make it the better for wheels. At Bulunkul there is a Chinese mud fort but this was unoccupied in October 1921, the Amban and some 80 soldiers living in Khirgahs and mud huts not far from it.

*Camping ground.*—For at least 2 brigades, one on each bank of river.

*Grazing.*—A little grass.

*Supplies.*—Except sheep very limited.

## ROUTE NO. 4 (1).

From Tashkurghan to Bulunkul (alternative.)

*Authority.*—N. Fitzmaurice reports distances from Tashkurghan to Bulunkul as follows :—

			Miles.	Stages.
Tagharma	..	..	12	
Gidjek	..	..	12	
Kara Su	..	..	9	
Subashi	..	..	17	
Bulunkul	..	..	22	
Total	..	..	72	5
				X2



## ROUTE NO. 4 SECTION No. 2.

## FROM BULUNKUL TO MUK.

[See Routes in Russian Central Asia, 1923, Part III,  
Route XIII (A).]

- 1 CHUKKERAVIL .. 19 m. The Gez river is  


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19 m. forded at Bulunkul  
and the road continued  
down the left side of the valley. Short distance above the  
junction of the Gez and Tumanchi rivers the road turns N. W.  
and then continues alongside the Tumanchi river to Chukkeravil;  
the river is crossed to the left bank and the crossing is said  
to be difficult at very high water. The valley is dotted with  
Kirghiz encampments and the grazing is very rich. The last  
Kirghiz encampment marks the boundary between the Tash  
Kurghan and Kashgar districts.
- 2 KONTIGMAS .. 12 m. The valley narrows  


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31 m. and the road lies for  
some miles along the  
lower slopes of the hills. At m. 5 the valley again widens out.  
The grazing is rich and there are several Kirghiz encampments,  
but the valley is swampy and the mosquitoes are very bad.  
*Here a road branches off to the Ulugh Art Pass.*
- 3 KIAKBASHI .. 23 m. The road conti-  


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54 m. nues up the valley  
where there are oc-  
casional Kirghiz encampments and crosses to the right bank of  
the river, which at mile 12 received 2 tributaries, the Armut  
and Kazarut. Good grazing.
- 4 KARA ART SU .. 23 m. The road crosses  


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77 m. again to the left bank  
and then leaves the  
river; after m. 2 no more grass is seen. The valley is wide  
and open and the ascent continues very gradually till the sum-  
mit of the Oyurma Pass is reached at m. 16. The road then  
descends to the bank of the Kara Art Su, which is reached at  
m. 23; the descent is very gradual at first but very steep for the  
last few hundred feet to the river-side; the worst part is protected  
by a parapet of stones. At the foot of the pass there were two  
akhois occupied by Kirghiz set to watch the Frontier and at  
this post there is very good grazing.



ROUTE NO. 4. SECTION No. 2—*contd.*

5 MUK .. .. 10 m. The road then descends the Kara Art Su gorge for 10 m. to Muk; the gorge is narrow and full of boulders and the going is very rough. Muk is picturesquely situated among red cliffs at the junction of the Kara Art Su and the Kizil Art Su, the combined stream being known as the Mar Kan Su: there is a small Chinese fort about 40 yds. square, and the nominal strength of the garrison is 30 men. There are also some Kirghiz soldiers in the four akhois on the opposite side of the river. No grazing.

*Note.*—From here onwards to Koksai (157m? 7 stages?) the route is possible at any time of year, but there is considerable snow on the Frontier in the winter when it is therefore not a good military road. (Brigadier-General R. Pigot, 1923.)

## ROUTE NO. 4 (2).

FROM MUK TO KARA ART (PASS), S. S. W. OF MUK.  
miles? stages?

*Authority.*—Brig.-Genl. R. Pigot, May 1924.

*Epitome.*—Only possible for Yak transport in winter being over 15,000' and much snow.

## ROUTE NO. 4 B.

FROM MUK TO KASHGAR *via* OPAL.

152 miles.

6 stages.

*Authority.*—As for Route 4.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1 (CAMP) .. ..	15 m. From Muk Fort on the right bank of the Markan Su the road immediately crosses the Karak Ya Pass, but, unless the water is very high this pass can be avoided by fording the river twice. At m. 5 the road leaves the river and crosses the two Yenbulak Passes; these are steep in places but possible for laden animals; one or two Kirghiz akhois may usually be found in the valleys not far from the road. There are occasional patches of grazing.



ROUTE NO. 4 B—*contd.*

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2 (CAMP)

.. 12 m. The ascent of the Mingtege passes commences immediately.

27 m.

There are really four, and they are only passable with difficulty by lightly laden ponies. The Kirghiz in the neighbourhood are very poor and only one or two yaks can be found: two akhois are generally to be found at a camping ground beyond the Mingtege Passes, but there is very little grazing.

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3 AIGHAT KARAU .. 25 m. The road runs for four m. by the side of a mountain stream down

52 m.

a narrow gorge full of boulders; very bad going. It then turns abruptly up the hillside on the right bank and commence the ascent of the Aighat Pass. Two huts for the use of travellers are passed at m. 10. The pass is easy and the summit is reached at m. 12. Gradual descent by the side of the Aighat stream. At m. 19 and m. 21 the valley is almost blocked by two barriers of rock which date from the disastrous earthquake of 1901; above the barriers the stream has formed lakes of considerable size. Aighat Karaul is reached at m. 25; there is no longer a Chinese post there and the place is deserted. Three of the six houses were locked up. Good grazing at Aighat Karaul and occasionally at spots near the road. Fuel abundant, from forests of stunted pines.

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4 BIRTAKAI

.. 25 m. The road descends the valley besides the Aighat river which it

77 m.

crosses occasionally. After some miles the valley is thickly studded with Kirghiz houses, but these are all deserted in summer. Lower down the valley, the road becomes very trying as it winds up and down the sides of innumerable deep nullahs that cross the valley at right angles. The road finally emerges on to the valley of Birtakai where there is a considerable expanse of grazing, and wheat is also cultivated. Birtakai is said to have eighty families, but the inhabitants are nearly all away in the mountains during the summer. Very good grazing.

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5 OPAL

.. 40 m. The road crosses the Aighat River and continues down the

117 m.

Birtakai valley to m. 4 where a low ridge is crossed: the road



ROUTE NO. 4 B—*contd.*

soon enters a stony desert across which it runs till m. 24, after which it winds among mounds and descends to the banks of a stream flowing beneath steep cliffs. *Soon after the path joins a cart road* and passes a Chinese fort. A very gradual ascent follows to the top of a slope where the remains of some old Kalmuk houses are to be found. From the summit there is a fairly rapid descent into the rich oasis of Opal. Opal is a large and scattered village of 100 houses with a Chinese fort and a market every Monday.

Camping ground.—	} Plentiful.
Water.—	
Fuel.—	
Fodder.—	
Supplies.—	

6 KASHGAR

.. 35 m. From bazaar, road runs through highly cultivated country for

152 m.

3 m. after which there is a heavy going through sand until reaching Langar, a *sarai* in a stony desert, large village of 450 houses. At m. 10 pass through Tokuzak which has a market day on Wednesdays. At m. 20 reach Chong-Terik, a hamlet of 24 houses. *From here a road goes to Tash Malik and Bulunkul.* The road now continues through cultivated country passing several small villages and fording some insignificant streams which are mainly off-shoots from the irrigation channels. At m. 10 pass through Tokuzat which is a large village of 450 houses with market day on Wednesday. Road leads across the branches of the Kizil Su at 27 m. and 29 m. and crosses the Kizil Su at 32½ m., thence along old city road through well shaded avenues.

## ROUTE NO. 4 C.

FROM MUK—KARANGALIK, *via* KARA BEL PASS.

? miles.

? stages.

Authority.—?

*Epitome.*—The route goes down the Markan Su valley, *via* Chichirganak, across the gentle Kara Bel Pass to Route VI.

*NOTE.*—At low water a road can be taken from Muk to Kashgar through the Markan Su gorge, but some of the fords are impassable in summer.



## ROUTE NO. 4 D.

*Note.*—From Archebel Karaul on the Markan Su a track joins up with Route 4 B at Birtakai.

## ROUTE NO. 5.

FROM YANGI HISSAR TO RANG KUL *via* TOKH  
TEREK PASS.

130 miles.

11 stages.

*Authority.*—Macartney, 1896 ; Chitral Diary, 1899 ;  
Lt.-Colonel P. T. Etherton, 1919 ;  
C. P. Skrine, 1922.

*Epitome.*—This route is practicable for pack animals. It crosses three passes—the Ghijak, the Kara Tash and the Tokh Terek, all of which can be crossed without any difficulty by laden animals.

*Camping ground.*—Ample.

*Water.*—Plentiful.

*Fuel.*—Scarce.

*Fodder.*—Generally good grazing.

*Supplies.*—Ample in the first three stages. Sheep in small quantities.

No. of stage and total distance.	Details.
1 GHIJAK 19 m.	.. 19 m. At m. 6 road goes through the ravine of Chong Karaul, a frontier post, and passes fortifications. At 11 m. Kichik Karaul and village are passed. <i>Here route I. G.(1) joins from the east.</i> At 14½ m. the road branches from the main valley up the Ghijak ravine on the left bank. Cultivation, wood, grass, etc.
2 KARA TASH CHAT.. 37 m.	18 m. The road leaves the Ghijak ravine at 7 m. and turns up a nullah towards the Ghijak Pass crossing it at 12½ m. Thence the road descends to the valley of the Kara Tash river. Kara Tash Chat is a Kirghiz village.



ROUTE NO. 5—*contd.**Fuel.*—Brushwood.*Grass.*—Obtainable. •*Note.*—Route I comes in here.

## 3 SHARGHUT

.. 19 m. Road goes up the  
Karatash R. (see  
Route I, stage 3). At56 m.  
m. 4 the valley takes a turn for the S. W. at the junction of the  
Buramsal and Karatash streams. A few huts of nomad Kirghiz  
are usually to be found at, or near, Shargut.*Fuel.*—Saxaul.*Grass.*—Obtainable.

## 4 TOYAKUIRUK

15 m. At 5 m. the road crosses  
Kara Tash Pass to the  
valley of the Gez.  
Colonel Kornilov said:  
"Its height is 16,500'71 m. ("Camels tail" so called  
from a species of grass of  
that name which is plenti-  
ful).  
and the steepness of its slopes makes it one of the most difficult  
passes in the Kashgarian hills. The ascent from the side of  
Karakul is especially difficult being covered with rubble and  
fragments of rocks." At  $\frac{1}{2}$  m. from camp the descent is difficult  
for about 200', where baggage animals should be unloaded.  
There are generally a few Kirghiz here.*Fuel.*—Saxaul.*Grass.*—Obtainable.

## 5 LITTLE KARA

.. 12 m. At  $2\frac{1}{2}$  m. the road cross-  
es the left bank of the  
Gez and winds through83 m.  
low hills to the valley of the Kara Kul Lake. There is an alter-  
native route from Gez past Kangshiwar (Kirghiz encampment) at  
about 6 m. The road goes up the valley of the Karakul outlet to  
the N. end of the lake. Distance 5-6 m.*Fuel.*—Saxaul.*Grass.*—Obtainable.6 FOOT OF TOKH  
TEREK PASS... 13 m. 4 f. Subashi (Route 4  
Sec. 1, stage 3) is  
passed at  $8\frac{1}{2}$  m. From96 m. 4 f.  
here a track goes to Sarikul up a ravine to the foot of the pass.*Water.*—Is scarce in autumn, none in winter.*Fuel.*—Nil.*Grass.*—Scarce.



ROUTE NO. 5—*contd.*

7 KARASU .. 13 m. 4 f. The road crosses  
 110 m. Tokh Terrek pass  
 (14,000') and goes  
 down an easy valley gradually widening into open *Pamir* about  
 Kara Su. There are several Kirghiz encampments here.

*Water.*—Obtainable.

*Fuel.*—Saxaul obtainable.

*Grass.*—Obtainable.

8 RANG KUL .. 20 m. Over open *Pamir* the  
 (EAST END) whole way. Lord  
 130 m. Dunmore said. "The  
 post of Rang Kul is built on the plain about 3 m. S-E. of the  
 lake, being 13,500' above sea level. It is octagonal in shape.  
 The walls are 4' 6" high and the *enceinte* 280 yds. The walls are  
 built of sand bags and there is a ditch and glacis, very much out  
 of repair."

*Water.*—Obtainable.

*Fuel.*—Saxaul.

*Grass.*—Obtainable.

## ROUTE NO. 6.

FROM SHATTU (ROUTE I) TO KARASHAR VALLEY  
 AND KARAKASH *via* TEKES RIVER, KARAJUNG,  
 AND KARAGAY TASH PASS AND YULDUZ.

466 miles.

28 stages.

*Authority.*—Major A. D. Greenhill Gardyne, Gordon  
 Highlanders, May 1911; Brig.-General  
 R. Pigott, September—October 1923 (only  
 man to report on stages 11—28.)

*Epitome.*—This is an easy road for pack transport, none of  
 the passes presenting any difficulty. The greater part of the  
 country which is traversed by this route consists of down-like  
 hills which can generally be passed almost anywhere, even by  
 mounted men. *N. B.*—There are many routes from the Yulduz  
 to Kuldja, all of them easy and used equally according to what  
 part of the Yulduz it is desired to start from or reach.



ROUTE NO. 6—*contd.*

*Aerodromes.*—Everywhere except stages 24, 25 and 26.

*Camping grounds.*—Available, throughout, for at least 1 division.

*Water.*—Plentiful throughout.

*Fuel.*—Plentiful except stages 5, 9 and 10, as far as Yulduz, after which nothing but *Tizzak* (horse and cow dung) until 2 marches from Karashar.

*Supplies.*—Sheep and horses plentiful throughout, grain, etc., obtainable in small quantities in the Tekes valley only.

No. of stage and total distance.	Details.
1	<p><b>AKSU RIVER</b> .. 11 m. General direction N.-E. Path ascends the river bluff and emerges on the 20 m. wide Tekes plain, in which there are long smooth undulations. Pasture is very rich but begins to dry up in July. The bottoms are very boggy in Spring. There are numerous paths in all directions, and the plain is passable everywhere by wheeled transport. Aksu is a small river, always fordable, non-glacial, with some willows along its shallow depression. Camp may be pitched anywhere along the Aksu, but its situation will generally depend on the position of the Kalmak camp, which may be anywhere along the river.</p>
2	<p><b>AGIAS RIVER</b> .. 15 m. General direction E. Path leads across open plain, covered with very rich pasture. Cross two small streams flowing N. from the mountains to the S. Gradually approach the mountains which form the end of the left wall of the Agias valley, close under which, in the junction of the Agias and Tekes valley, is a log hut known as Kazak Karaul or Agias, and a Kashgari merchant's shop. The path descends a stony bank 100' into the present valley of the Agias river which has here just escaped from the mountains by a narrow gorge. The path turns up stream to the exit of this gorge and crosses a solid log bridge in good condition and fit for wheeled traffic. Camp either at Kazak Karaul or 1 m. further on at Bedelek Su. There is an alternative route over the river, should the bridge be destroyed, <i>via</i> Agias ferry just above the junction of the Agias with the Tekes</p>



ROUTE NO. 6—*contd.*

river, 20 m. N.-N.-E. There is a good, but long ford. Hence the path lies close to the Tekes river.

3 MOINTAI RIVER .. 18 m. General direction N.-

44 m.

E. Path runs along the edge of plateau above Agias river to descent of 100' to the small valley of the Bedelek Su, which is easily fordable, except perhaps for a short time in spring. Beyond this, re-ascend. The Agias valley is  $\frac{3}{4}$  m. broad between pebbly bluffs, 100 to 200' high. The valley trends N.-N.-E. The path leaves it continuing N.-E. and E.-N.-E. over a ridge and furrow spur, good pasture but bare in places. A path ascends the Bedelek Su, over the Gieke pass into upper Agias valley. At 4 m. pass a large Kazak tomb to the left. At 5 m. turn more to the E., cross a small tributary of the Bedelek Su. Many paths strike southwards to Kazak camps on the hills to the S. where there is a considerable population in the summer. At 14 $\frac{1}{2}$  m. reach the Mointai valley and follow it 4 m. down to the Tekes plain. Descend 100' into the bed of the river. Pastures, some willows and poplars. The river is easily fordable except for about a month in spring. The Tekes plain has now changed its character, being undulations running down from the range to the S. The Tekes river is now 5 m. to the north and the main valley is about 3 m. wide.

4 KOK TEREK .. 12 m. General direction N.-  
(RIVER). E. The country is the

56 m.

same, the hills lying further away to the S. The Kok Terek river is a considerable stream, sometimes unfordable in summer. Its valley is 1 m. broad between 300' bluffs. There is a belt of willow, poplars, alders and other bush along the stream. There is a trader's store near the river. Some corn is grown in the N. end of the valley. There are paths in all directions. Elevation 5,000'.

5 KOK SU BRIDGE .. 20 m. N. down the right bank  
of the river. At 3 m.

76 m.

ascend the bank and continue N. E., over undulating down-like plain, dotted with patches of corn. At 7 m. the path turns N. along a small stream. Marshy in places. Emerges on Tekes river plain now 2 m. wide. The river flows in a belt of wood at N. side. Plain is irrigated and rich with crops. From here the direction is N.



ROUTE NO. 6—*contd.*

E. Cross the Chelakturuk, a small stony river. Several farms and a Chinese store at 13 m. Hence 5 m. along the edge of cultivation to the junction of the Kok Su and Tekes river plains. Here there is a large Kashgari farm. On the N. bank of the Tekes river is a mud-built Kalmak village of Saghan Tokka. Hence 2 m. E. to bridge, across flat river plain to entrance of narrow gorge with cliffs conglomerate, 150' high on the left, and 500' high on the right bank of the Kok Su. For half a m. the river is confined in a channel 30 to 40 yds. wide between steep banks, 20' to 50' high. The bridge has an 80' span, was formerly strong, but is now in very bad repair, the roadway being full of holes. The road is borne by huge pine logs, resting on rough stone abutments. Above the gorge, river is strong and glacial, 100 yds. broad and quite unfordable in summer. Camp on right bank near bridge.

*Fuel.*—Scarce.

## 6 KARAJUNG

.. 18 m. General direction S. E.

94 m.

At  $\frac{1}{2}$  m. path turns S.

along the right bank

of the river and is very slippery, 20 yds. of rock, between the river and the cliff requiring great care with horses. One or two Sart farms, small irrigation cuts, and cornfields. Hence at 3 m. S. E. up a small stream, path a little stony, cultivation ends. The hills are barren and passable by cavalry. At m. 6 the path forks, the longer and easier path leads up the *nullah* to the E., the shorter turning S. up a small ravine. The path is then bad for 1 m. up stony slopes. Ascend for 750', then emerge on upland downs with splendid pasture. These form the divide between the Koksui and Jirgalan systems. The path follows the broad rolling divide, gradually ascending for 1,000', when some wood and springs occur in the heads of small valleys. At 15 m. gradual ascent as path approaches the head of the deep wooded valley of the Kurdia river, which flows W. N. W. to the Kok Su. The downs become narrower and swell into hills, peaks of which are about 8,560', with some pine wood and many springs. This range is the chief summer camp of the Kok Su Kazaks. The whole is known as Karajung. Paths in all directions, and the country can anywhere be crossed by cavalry. There are any number of paths over this divide, and all are easy.



ROUTE NO. 6—*contd.*

7 FOOT OF KURDIA .. 14 m. The path winds along  
 ——— PASS the downs of 8,000'  
 108 m. 9,750' elevation, dividing the  
 Kok Su from the western streams of the Jirgalan systems. Good  
 paths lead in all directions. At 5 m. path turns S. along spur  
 above the Kurdia river. At 8 m. the path drops 800' by a steep  
 grass slope to the river at its exit from the main range. The  
 descent is slippery, but there is a good path at the bottom, where  
 the valley is a  $\frac{1}{4}$  m. broad. Numerous heads of sheep and horses  
 are passed. Cross stream and ascend through pine woods, which  
 cease at 8,500'. The valley is now  $\frac{1}{2}$  m. broad and the path good.  
 Cross and recross the stream, gently ascending. Camp in fine  
 pasture at the bottom of the ascent to the Kurdia pass.

8 SARITUR VALLEY .. 16 m. Leaving the Kurdia  
 ——— 10,000' valley the path  
 124 m. ascends by easy zig-  
 zags for 500'. Hence, along easy, gradually ascending valley,  
 of which the last mile is stony and soft. There is an easy ascent  
 to the Kurdia pass (11,900') over a round shale ridge between  
 the summits, which are only 300' to 400' higher. 500 yds. N.  
*a lower gap gives access to the small Kustai valley.* At  $4\frac{1}{2}$  m. there  
 is a steep but not difficult descent of 500'. Thence easier  
 slopes down to a stream, which originates in an ice-capped peak  
 1 m. to the S. Hence 4 m. N. E. an easy descent to a valley,  
 crossing and recrossing stream, brings the path to the junction  
 of streams from Sari Tur and Kurdia passes. The path now  
 reaches the top of the pine woods where there are large herds of  
 sheep and horses. The path then leads to the Sari Tur (11,000')  
 between smooth hills barely 1,000' higher than the path. Hence  
 there is an easy descent to the Sari Tur valley. Splendid grass  
 but boggy in places. Large troops of horses.

9 JUNCTION OF .. 17 m. Path runs E. along the  
 ——— KARAGAY TASH level and grassy val-  
 141 m. AND ley, 1 m. broad. Cross  
 KOK SU VALLEYS. stream at head of  
 10,400' valley and down the  
 left bank. At 3 m. the stream leaves the upland valley by a steep  
 and narrow gorge through which there is a path to Kok Su.  
 At 5 m. the path continues E. and ascends easily to a broad  
 smooth ridge (11,000') whence the upper Kok Su valley. Karagay



ROUTE NO. 6—*contd.*

Tash and the line of the Kok Su-Yulduz divide are visible. The broad lines of slopes all round are so easy as to give more the impression of moorland than mountain. From the divide, 2 m. descent. The path is boggy and ill-defined. The path then winds round the ridges falling to the S. with many ascents and descents, but no difficulty. *At 14 m. a path strikes N. to the Jambil pass into big Jirgalan.* 3 m. further on the main path reaches the junction of the Karagay Tash with the head stream of the Kok Su, a shallow stony torrent, 60 yds. wide by 1' deep springing from a number of small glaciers in the southern range. The nearest trees are 12 m. W.

*Fuel.*—Scarce.

*Grazing.*—Good.

10 HEAD STREAM OF THE 13 m. Path ascends the Kar-  
YULDUZ. agay Tash stream;  
154 m. then zig-zags easily up  
to the summit of the divide. There are one or two small bogs.  
This is the main divide, 10,700'. The pass is marked by a small  
*Mazar* (Shrine). Hence over dry, level moors, splendid going,  
along a dry water course, which joins the northward flowing per-  
manent stream, to camp below some cliffs at junction with  
stream from the Jambil pass. The latter pass is said to be very  
easy, and Kazaks are said to bring their herds over it to graze in  
the Yulduz valley.

11 CAMP ON THE ... 10 m. Due E. to edge of big  
YULDUZ RIVER. Yulduz Plain. Fuel,  
164 m. *nil.* Tizzak plentiful.  
From this stage there is no fuel until 2 marches from Karashar.

12 CAMP .. 25 m. Due E. across the  
plain to small perma-  
189 m. nent stream which is  
the summer headquarters of the Kalmuks, the Kalmuk chief  
himself having his headquarters 25 m. E. Several small streams  
are crossed which were dry on October 1st, 1923. On this plain  
during the summer months are many thousands of ponies, sheep  
and cows. In November or end of October the Kalmaks  
leave this ground to spend winter in the less exposed country of  
the Kok Su river and the valleys in Karashah. From this plain  
tracks lead in every direction.

NOTE (a)—*To Kuchar vide Route No. 8.*



ROUTE NO. 6—*contd.*

NOTE (b)—*To Kuldja via*— i. Karajung.  
 ii. Narat Pass.  
 iii. Adynkur Pass.

None of these is said to present any difficulty winter or summer, and from a personal inspection of the passes themselves this would appear to be true. (See Route 7).

NOTE (c).—Route 6 (1). *To Karashar via* the Big Yulduz River in a S. E. direction. Said to be impossible for pack ponies throughout since at one part of the route the valley can only be traversed by boats (dugouts).

NOTE (d).—*To Karashar via* the Little Yulduz and thence *via* several different routes, all of them easy, to Karashar itself as follows:—

13	CAMP	.. 25 m. Due E. to Kalmak Chief's Headquarters on the Little Yulduz river. His Headquarters consists of a commodious two storey bungalow surrounded by a dozen or more Kalmak huts. This march is boggy in places.
214 m.		

14	CAMP	.. 16 m. E. to entrance of Narat nullah.
230 m.		

15	CAMP	... 10 m. E.
240 m.		

16	CAMP	.. 16 m. E. to entrance of Adynkur Nala.
256 m.		

17	CAMP	... 10 m. <sup>E</sup> E.
266 m.		

18	CAMP	.. 35 m. E. to R. Zagaentai (Russian 40 verst map) at the foot of the Saarmin Ula Mts. From here several routes run to Karashar over down-like country easy except for 3 stages down the Karashar river, viz., stages 24, 25 and 26.
301 m.		



ROUTE NO. 6—*contd.*

19		
316 m.		
20		
331 m.		
21		
346 m.		
22		Camp anywhere. Water and grazing plentiful. Fuel <i>nil</i> except Tizzak.
361 m.		
23		
376 m.		
24	CAMP	.. 15 m. Down the Karashar river. Track stony and rocky occasionally, crossing and recrossing river. Valley usually $\frac{1}{4}$ m. broad with steep hills on either side.
391 m.		
25	CAMP	.. 15 m. Down Karashar river crossing and recrossing river several times.
416 m.		
		Fuel is found here again from now on to Karashar. Grazing from now on to Karashar scanty. Road very rough.
26	CAMP	.. 15 m. Down the Karashar river to the Plains. Road very rough crossing and recrossing river many times, easily fordable everywhere.
431 m.		
		Novemder 1923.
27	KHOTAN SIMBU	.. 15 m. Khotan Simbu is the winter H. Q. of the Kalmak Chief. This march leaves the Karashar river which winds considerably. Route sandy, suitable for cars.
446 m.		
		<i>Supplies.</i> —Nil.
28	KARASHAR	.. 20 m. Route sandy, suitable for carts.
466 m.		
M226CGS		



## ROUTE NO. 7.

FROM TEKES RIVER BRIDGE (JIRGELAN) TO  
KULDJA *viâ* ILI RIVER.

65 miles.

3 stages.

*Authority.*—Major A. D. Greenhill Gardyne, Gordon Highlanders.

*Epitome.*—This is an important local route and forms a link between Kuldja and the thickly populated valleys of the Big, Middle and Little Jirgalan rivers, from which access to the Yulduz valley is easy. The road is on the whole good and suited to wheeled transport, while the country round is suitable for the movement of all arms. There would be some difficulty in finding the means for the crossing of the Ili river at Yamantur ferry (stage 2), as at present there is only one ferry-boat available.

From the Tekes river bridge an excellent path (almost passable for carts without improvement) leads up the big Jirgalan valley, 30 m. to the foot of the range and thence to Yulduz valley by the easy Jambil pass. Another good track leads up the Little Jirgalan and parallel valleys. A further good route lies eastwards up the Kunges valley, starting some 20 m. N. of the Tekes Bridge.

*Camping ground.*—No information.

*Water.*—Plentiful.

*Fuel.*—No information. Probably scarce at intermediate stages.

*Fodder.*—Good grazing throughout.

*Supplies.*—Scarce, except at Kuldja, where very plentiful.

Sheep plentiful throughout.

No. of stage and total distance.	Details.
1  18 m	JHIMPANG .. 18 m. The bridge over the Tekes river is situated between the junctions of the Little and Big Jirgalan rivers with the Tekes river. The bridge, which is known locally as the Jirgalan bridge is built of heavy pine logs on the cantilever system. It is 75' long with a centre span of 40'. It is 30' above the river when the latter is



ROUTE NO. 7—*contd.*

at its normal level, and is in a bad state of repair. The approaches, especially on the right bank, are slippery and need care with laden animals. There is a toll house on the left bank kept by Tungan levies. The road is a fair, hard, cart road without any difficulties. The Tekes river is, as a rule, from 80 to 150 yds. broad and unfordable, and runs in a bed some 200 yds. wide (October). There is a fringe of bush and poplars in the river bed, otherwise the country is bare, but a number of pine logs are as a rule to be found stranded in the river bed. The road leads along the left bank of the river, then N. W. over bare downs 750' above the river. Crossing these it then descends some 600' into a bare level *steppe* on which the vegetation has been closely cropped by herds of sheep and goats. There are also a few horses. At 8 m. pass some nomad encampments, and, at 10 m. near Kir, are villages, partly Kashgarian and partly Manchu. The *steppe* is very bleak but is cultivated in string, and is irrigated. Jhim-pang, 3 m. N. of the road is a recent and populous Manchu village. Camp on road at the last water at a new farm.

2 YAMANTUR .. 20 m Excellent road across flat  
FERRY. *steppe*. There is a little

38 m.

local traffic but no set-

tled population, except near the river. At 10 m. the Ili river appears, 5 m. to the N. There is a belt of vegetation along it. At 13 m. there are bare mountains to S., 4,000' above the *steppe* and rising towards the W. The river gets nearer. At 16 m. the plain begins to undulate and ends in a low bluff, below which there is a belt of trees, grass, water and reeds. There are a few farms and villages to the N. The road descends into the river plain. At 18 m. there is good pasture, and an arm of the river approaches to within half a mile. At 20 m. the whole river runs in one branch. Crossed by a ferry, 150 yds. long, at the lower end of a large pool. The water is deep near the left bank and shallow near the right. The left bank is 15' high and under it the main current runs, swift but favourable. The ferry boat has no oars, but is towed over by three or four coolies swimming. Land 100 yds. below straight point. Pack animals have to be off-saddled and swum. The ferry is in charge of a Kalmak subordinate with 3 or 4 men. There is a *serai* on the left bank and a farm N. of Yamantur.  $\frac{1}{2}$  m. away on the right bank the village of Kala-chi-malesy.



ROUTE NO. 7.—*contd.*

3 KULDJA .. .. 27 m. This stage could be conveniently broken  
 65 m. at many villages *en route*, having sufficient water and pasturage. At 4 m. the road runs through fields, to a well-to-do Saiad village of Mazar where there is a conspicuous, domed, brick tomb. Hence there are villages at intervals, some deserted, and others in process of being resettled. Cultivation, trees, canals, etc., similar to a small and poor Kashgarian oasis, but with few trees. At 10 m. the road approaches the river, 200 yds. broad, with a smooth swift current. After 2 m. the river bends away to the West for a few miles and the road is bad and cut up by several deep, dry nullahs with bad approaches. To the N. the country is dry and barren and rises to a line of dunes or upland. Under the upland appears the cultivation of Kuldja, the edge of which is soon reached. The local traffic is now considerable and the road is much cut up into ruts, and probably would be very bad in wet weather. At 26 m. the houses increase and there is an avenue of poplars to Kuldja bazar. There are many irrigation channels. The Ili river is now 2 m. to the S.

## ROUTE NO. 8.

FROM KUCCHAR TO TALAMAT OR KARA DAWAN PASS.

91 miles.

6 stages.

*Authority.*—N. Fitzmaurice, 1921.

*Epitome.*—This is a short route from Kuchar to the Yulduz Valley. The chief obstacle is the Talmat Pass itself, which can be crossed on foot but which is impassable, even for unladen animals for a great part of the year. Otherwise the road is fit for pack transport; it is sometimes used by traders.

*Camping ground.*—Good.

*Water.*—Good and plentiful.

*Fuel.*—Abundant.

*Fodder.*—Good grazing in summer, except at stage 1.



ROUTE NO. 8—*contd.*

*Supplies.*—Nil, except sheep at most stages.

No. of stage and total distance.	Details.
1 KANG (CH. NAME T'UNG 16 m. CH'ANG KOU).	.. 16 m. The road, generally lined with mulberry trees, runs northwards through the oasis till m. 3, where it emerges on to an open stony desert. Several streams, into which the Kungai Koksū divides on entering the plain, are forded. At m. 10 the road leaves the desert plain and passes the ruins of an old city. The small village of Langar, picturesquely hidden among the trees in a desert waste, is reached at m. 11; stone is quarried just beyond the village. At m. 12 the road returns to the river bank and enters a narrow gorge, through which it runs for 2 m. up the right bank of the river; a rough but serviceable path has been made between the cliff and the river. At m. 14 the valley widens out, and Kang, a fair-sized village, is reached at m. 16; copper was formerly mined here. Supplies are limited and fuel scarce.
2 TAKMAK .. 35 m.	.. 19 m. The road returns through cultivated land to the right bank of the river. If the water is low, it is possible to travel by a good though rather stony path up the bed of the river, crossing branches of the river from time to time. At high water this is impossible, and it is then necessary to take a rough and stony path up the hillside, up and down the sides of a succession of steep ravines. At m. 12 the road rounds a corner of the cliff and reaches Bashkichick, a small group of deserted houses. The river is constantly changing its course; in June it flowed right up to this cliff and the corner was difficult to negotiate, but a few days later it was flowing at the opposite side of the valley. At Bashkichick the road leaves the river and leads through a gorge with precipitous sides before commencing the ascent of a low pass, the summit of which is reached at m. 16. Both ascent and descent are steep near the summit, but other- wise gradual and easy. Takmak consists of 3 or 4 houses; there is a little cultivation. Good grazing and good water.



ROUTE NO. 8—*contd.*

3 CHONG YAILIK .. 22 m. The road leaves the valley in which Takmak

57 m.

is situated through a gap in the hills, and crosses the bare and level country. At m. 3 there is a steep descent to stony ground, and at m. 5 another steep descent leads to Kizil: Kizil consists of two or three scattered houses beside a fair sized stream, with excellent grazing, but fuel is scarce. For the next 14 m. the road runs up the valley beside the stream which is crossed repeatedly. The valley gradually becomes narrower until it contracts into a gorge with precipitous sides, in which the torrent has to be crossed 40 or 50 times. If the water is very high, this gorge is impassable. The gorge is full of boulders and some of the crossings are troublesome; the going is very bad. The pine tree level is reached during the ascent of the gorge, and many of the slopes are covered with pines. At m. 19 the road leaves the gorge and the main stream up a grassy valley in which there are some two houses. Chong Yailik is reached at m. 22 just over a stone bridge. Grazing good; fuel abundant; water good, but the supply is liable to cease during the night.

4 KARGHAN .. 18 m. The road continues up the valley and at m. 1 commences the

75 m.

ascent of the Kirghiz-at Pass, which is steep and rendered difficult in places by slippery slabs of stone and boulders; the loads of pack ponies had be lightened. The slopes are pine-covered during a great part of the ascent and descent. The descent is somewhat less steep, but the path is very rough and the northern slope is very swampy. At m. 9 the road descends to the bank of the Kok Su river, beside which it runs down stream till Karghan is reached at m. 18, the river being forded seven times. Some of the fords are difficult in summer and at times the river is unfordable; the water rises very suddenly in the afternoon. The banks of the river are well wooded and there is good grazing. Karghan consists of three or four scattered houses; there are two old watch towers in the hills; a considerable tributary joins the Koksu river here on the left bank.

5 TALAMAT .. 12 m. The road leaves the left bank of the Kok Su river and crosses

87 m.



ROUTE NO. 8—*contd.*

a low bridge. A tributary of the Kok Su river is then forded and the ascent of the Karghan pass commences immediately. The pass is well-wooded to the summit and the ascent is easy. The descent is very steep but there is a good path. At the foot of the pass the path skirts the edge of a large and deep lake of a bright blue colour which fills one end of the valley. The valley gradually narrows, and a good path continues all the way to Talmat which is reached at m. 16. Grazing in this valley is very good. At Talmat there are some akhois and one house. Good grazing; water and fuel in abundance.

6 SUMMIT OF TALA .. 14 m. The path leads  
 ——— MAT PASS. through wood and  
 91 m. soon commences the  
 ascent of the pass. The ascent is fairly gradual for most of the way, the path winding across ravines up the right bank of a small mountain torrent. In some places the path is narrow but the going is generally good. The latter part of the ascent is steep. There was deep snow on the pass at the end of June 1921, and it could not be crossed by unladen ponies; it could be crossed on foot with difficulty. It is not advisable to attempt to cross the pass with ponies until it is clear of snow, as the path near the summit is very steep and narrow and accidents are unavoidable: eight unladen ponies in Mr. Fitzmaurice's party fell over the edge on June 25th, 1921, and snow was falling on the pass on that day and the following day. Fuel is scarce on the north side of the pass, and the grazing is not good until the Yulduz Valley is reached.

## ROUTE NO. 9.

*Nil.*

## ROUTE NO. 10.

FROM KULDJA (ILI) TO CHUGUCHAK (TARBAGATAI)  
*viâ* SUIDUN AND KURTE.

342 miles.

14 stages.

*Authority.*—Lieutenant-Colonel P. T. Etherton, 1921. *See*  
 Routes in Russian Central Asia, Part III, 1923.

*Epitome.*—An unmetalled cart road throughout. Stages  
 1—6 (122 m.) *See* Route I, Section No. 4.



ROUTE NO. 10—*contd.*

*Camping ground.*—Ample. The ground being everywhere suitable for large camps.

*Water.*—Plentiful.

*Fuel.*— } Ample in the neighbourhood of Kuldja,  
*Fodder.*— } Kurte and Chuguchak, but very limited  
*Supplies.*— } elsewhere except grass and sheep.

No. of stage and total distance.	Details.
1 SUIDUN <hr/> 32 m. in Russian Semirechia. Suidun is a large town with a garrison which fluctuates.	.. 32 m. Good road through- out as this is on the main route to Vyerni
2 LU-T'SAO KOU <hr/> 47 m. 4 m. when they branch off, the Chinese road being a fair cart- way and everywhere passable for wheeled transport and artil- lery. Pass several guard houses at intervals. Road reaches hills some 8 m. short of Lu-T'sao Kou running through a narrow valley up to that place, which is a village of 26 houses with a <i>serai.</i>	.. 15 m. <i>The Russians and            Chinese roads run            together for the first</i>
3 ERH-T'AI .. <hr/> 63 m. to the Talki pass on the further side, just below the summit is a small Chinese fort. At 10 m. runs through narrow valley. Descends to, and follows the S. shore of the Zairam Nor (lake.) to Erh-T' ai	.. 16 m. Cross and recross river by substantial bridges. Road conti- nues level for 8 m. when it ascends through a cleft in the hills
4 SANTAI .. <hr/> 81 m. 8,200') on the N. side of which lies the Zairam Lake, 20 m. by 15 m. The ascent from Erh-T'ai begins at once through the	.. 18 m. On leaving Erh-T'ai road runs up the ra- vine to the Talki pass



ROUTE NO. 10—*contd.*

ravine, crossing and recrossing the river, which is a tributary of the Ili, several times on substantial bridges. The road follows the southern shore of the Zairam Lake to Santai, which is a village of 15 houses and one *serai*.

5 SETAI .. .. 20 m. Good road through-  
out over undulating  
101 m. plain with much  
grass. A tiny hamlet with a few Chinese.

6 CAMP .. .. 21 m. On leaving Setai road goes due N. over a wide and stony valley and thence enters the Borokhoro Hills on the northern side of which flows the Borotala River. The Borokhoro are barren hills, rock and gravel strewn with low, stunted scrub and wormwood in the ravines and narrow valleys by which the hills are intersected. At 12 m. road debouches on to an immense plain and at 21 m. reaches the Borotala River on the N. side of which is a Kalmak settlement. Grass and sheep can be obtained here in large quantities. On this or the following stage the Urumchi road separates and leads to the E. (Route I, Section 4).

7 CAMP .. .. 18 m. On leaving camp road runs N. E. across the plain and at 12 m. enters country covered with low hillocks through which it continues to a guard house of four Mongol soldiers at 18 m. No supplies available here.

8 CAMP .. .. 23 m. Road runs through  
 163 m. hilly-country  
 covered with low  
 scrub but devoid of trees. Camp is by the Ebi Nor, a lake  
 some 40 m. long and of an average width of 25 m. The shores  
 to the S. and W. are quite flat and covered with salty deposit.  
 The Mongols call the district Kizil Tus and its main character-  
 istics are flat stretches covered with long grass, and swampy near  
 the lake shores. No supplies available.

9 CAMP ... 29 m. Road runs N. E.  
192 m. across the plain with  
M226CGS occasionally open  
2A



ROUTE NO. 10—*contd.*

ravines in the low-lying ground. The entire country is devoid of vegetation and only scant brushwood is met with at intervals.

10 CAMP .. .. 30 m. On leaving camp the route lies through a succession of rocky ravines averaging 200' high. At 4 m. cross a long open plateau and thence descend into a broad valley bare of trees but with grass in large quantities. Many Kazak *auls* (felt tents) are passed, and grass and sheep are available in ample quantities.

11 THUL .. .. 34 m. Road still continues through alternately level and undulating country until it again strikes the main road from Urumchi, and China Proper, to Chuguchak. Yamatu at 24 m. (*vide* Route XI, (stage 12). Yamatu is a small settlement of a guard house, one serai and 7 huts. The telegraph line connecting Chuguchak with China runs along this road.

12 KURTE .. .. 36 m. Road runs across the same level plain and good going passing Sari Khulsin at 17 m., a hamlet of 23 houses and one serai. Grass, wood and supplies available in limited quantities. Kurte is a village of 20 houses and ample supplies of all kinds.

13 TOUTAI .. .. 32 m. Good road and level throughout. At 9 m. pass the Emil river, not difficult, and at 11 m. ruins of village of Setar. At intervals pass homesteads until Toutai village, which consists of 80 houses and three *serais* with supplies of grass, wood, sheep, etc.

14 CHUGUCHAK .. 19 m. Good road right up to the city. Chuguchak stands on a level plain at the foot of the Tarbagatai Mts., is 12 m. from the Russian frontier, and has a population of 24,000. It is the headquarters of the district, and the town is surrounded by a wall and fortifications in the usual Chinese style.



### ROUTE NO. 11.

FROM LEH TO MURGO *viâ* CHANGLA AND UPPER SHYOK. (ALTERNATIVE TO XIV Sec. No. 1).

153 miles.

10 stages.

*Authority.*—Captain L. V. S. Blacker, The Guides, July 1914. See Routes 89 and 90 of Routes in W. Himalaya, Kashmir, etc., Vol. I.

*Epitome.*—In the summer this route is practicable for laden animals—Bactrian camels, but loads have to be man-handled in some places and Yaks are required over the Muzarat (Sanju) Pass. It is probably practicable throughout the year for ponies and yaks, except when Shyok river is in flood (probably  $\frac{1}{2}$  June., July, August). It is preferable to the Sasser (or Sasar) Route (No. XIV) as it avoids the Sasar glacier and was much used until the inhabitants of the Nubra valley made an outcry, and since 1916 the Nubra valley route was again reverted to and this route fell into disrepair. (*vide* Routes 88, 89 and 90 of Routes in the W. Himalaya, Kashmir, etc., Vol. I.) The chief obstacles encountered are the Karakash and Murgo rivers. The Chang La Pass through usually easy (*e.g.*, in early May 1922, there were no difficulties at all about it) is not always so. In November 1921, a large number of ponies (said to be 150) perished there, and in June 1922 loaded yaks failed to cross. This, 1921-22, was a winter with an exceptionally heavy snow fall. This route would in 1914 have been practicable during summer for a brigade of all arms, marching in two or three columns.

Sultan Shah took 40,000 men over in A. D. 1452.

*Camping grounds.*—Average for two battalions at each stage.

*Water.*—Sufficient everywhere.

*Fuel.*—At each stage there is usually sufficient for 250—300 men each day. Liquid fuel for 7 days' use should be carried between Ranbirpura and Suget Fort.

*Fodder.*—There is enough grazing for 200 animals, at least, at every stage, daily.

*Supplies.*—Nil, between Ranbirpura and Suget Fort, but Tibetan antelope, wild yak (in the neighbourhood of the Chanchen Mo and in the Karakash valley 5 marches above Suget), etc., are met with.



ROUTE NO. 11—*contd.*

At Tikse monastery small quantities of gram and barley are obtainable.

No. of stage and total distance.	Details.
1 RANBIRPURA	.. 14 m. (4½ hrs.) The road runs along the right bank of the river
14 m.	Indus in a valley 3 to 4 m. wide. Tikse and Shay monasteries are passed where about 20,000 lbs. of barley are obtainable in June and July. The track would be very difficult for Field Artillery, and for 3 m. out of Leh is commanded by rifle fire from spurs to the N. All the side valleys are cultivated and irrigated, and trees are plentiful. The hills are bare, steep and covered in shale. The river is navigable by boats and could be forded by camels in July, but rises after this. The bridge at Marsalang is fit for pack animals.
2 SAKTI	.. .. 18 m. (6½ hrs.) The track continues along the river bank. At half
32 m.	stage it turns up a side valley, ascending steadily to the Chang La. There is an alternative foot-path via the Kildyrma La (15,000').
Camping ground.—For one brigade around village. There is a rest-house amongst the trees.	
Fuel.—Ample, sufficient for 4,000 men.	
Grazing.—For 1,000 animals.	
Supplies.—Practically nil. But barley (quantity not ascertained) is obtainable at Himis.	
3 TSULTAK ..	.. 13 m. (5 hrs.) The track leads up a valley past barley fields and is
(16,500')	fair but impassable for wheels. A steady ascent at about 7° is made to Zingrul (16,700') via Taga (22 houses), but on this section marching is laborious. There is good grazing in the valley, and around Zingrul, where there is a camp space for a brigade. The ascent continues steeply (15°) up to the pass, the last portion being in very steep zigzags. The pass is 19,600'
45 m.	



ROUTE NO. 11—*contd.*

and snow lies there in July. There is a chorten and a stone well across the summit, which are no obstacle.

The descent to Tsultak is rough and takes 2 hrs. Here there is a lake 300 yds.  $\times$  100 yds. The track is everywhere commanded by hills.

*Camping ground.*—For one division.

*Fuel.*—Argol and burtze, sufficient for 2,000 men.

*Grazing.*—For 2,000 animals.

4 SHAIOK (SHYOK) .. 19 m. ( $9\frac{1}{2}$  hrs.). Suitable  
 (13,050') for pack transport.  
 64 m. The first portion of  
 this stage is a gradual descent ( $4^{\circ}$  to  $5^{\circ}$ ) through an open valley between granite hills. On both banks of the stream there is fair grazing. The path ascends 500' over a spur called Chigar station where the stream becomes an impassable canyon and grass disappears. After 2 hrs. the path descends a steep, rocky watercourse, where the going is heavy in deep sand, to the Drugub (Durgu) bridge (13,400'). The bridge is  $20' \times 5'$ , consisting of five 5" road bearers. The stream is fordable in July.

Thence, a heavy ascent ( $15^{\circ}$ ) in deep sand, and through a gorge, the path zigzagging up and down cliffs from river level to 1,200'. The path affords few passing places and the going is poor, both hillsides are precipitous. Shaiok consists of 20 stone huts and possesses cultivation. It is the last village till Suget is reached.

*Camping ground.*—Near Shaiok, for one division in a valley a mile wide.

*Fuel.*—Unlimited.

*Grazing.*—For 1,000 animals.

*Supplies.*—Practically *nil*.

5 CHANG JANGAL .. 13 m. ( $5\frac{1}{2}$  hrs.). The path  
 (12,800') descends ( $8^{\circ}$ ) steeply  
 77 m. from village *serai* to a  
 bridge over river Drugub, immediately above confluence. The bridge is a semi-cantilever,  $30' \times 5'$ , and consists of five 4" road bearers. The stream is torrential in July and quite unfordable. The approach to the bridge is bad, the exit better. Path then runs through brush-wood thickets, 5' to 6' high. The hills to the S. are 500 yds. from the river and 200 to 300' above it.



ROUTE NO. 11—*contd.*

After 45 mins. the path passes a cairn and ascends 500' over spurs. The hills especially to the N. here become very steep.

At 2½ hrs. Shirshak is passed, where ample grazing and fuel exist; from here a very difficult footpath leads to Tankae.

At 3 hrs. path drops to river-bed under high mud cliffs and climbs thence by built-up zigzags to 1,000' above the river. The valley is here much narrower and river makes a sharp bend. Thence by steep zigzags down to camp at river level, which is 100 yds. wide and unfordable in July.

*Camping ground.*—?

*Fuel and Grazing.*—Ample.

6 DANSIR .. .. 21 m. (8¾ hrs.) The track  
 (13,400') runs along the sandy  
 98 m. level bed of the river,  
 up the E. bank. The river here varies from 500 to 800 yds.  
 wide, and the hillsides are almost perpendicular. At 3 m. the  
 path runs slightly up-hill, avoiding a quick-sand. At 2¾ hrs.  
 path reaches up Changchenmo confluence (rising up over a cliff),  
 100 yds. above which a bridge of willow baulks 6' wide 300 yds.  
 long. The river is quite unfordable in July. The junction of  
 the 2 valleys forms an open stony plain.

Path runs for several miles over stony plain of Changchenmo valley. Here is much brush wood, grass and fuel for 1,000 men. At 4 hrs. a yellow sandstone cliff is passed; this is a conspicuous landmark. Path continues in bed of river, more brushwood and grass being passed. At 6 hrs. river narrows and the track (5' wide) ascends hillside. At 7½ hrs. a small side stream is passed and path re-descends steeply to river, which here is 200 yds. wide, deep and swift, and which follows to Dansir. From Dansir onwards hills are less steep and side valleys more open up to Dispang.

*Camping ground.*—Sandy spot for one brigade.

N. B.—There is a better camp with grass and fuel, 1½ hrs. further on.

*Fuel.*—For 500 men.

*Grazing.*—Grass for 100 animals.

7 CAMP. (LAT. 34° 37' N.) 20 m. (8½ hrs.) Path as-  
 (13,900') cends cliff (at 112°) to  
 100 m. 13,900' leaving river  
 500' below. After 1 hr. path crosses a spur, descends to a nullah,  
 and crosses a torrent 8' wide, ascending a high, steep bank. At



ROUTE NO. 11—*contd.*

1½ hrs. a yellow crag (100 yds. W. of track and 100' high) is passed, reaching a good camp site, where there is grazing for 100 animals and fuel for 200 men. Path then ascends steeply to top of yellow spur (20°), and zigzags down stream (20 yds. wide). Two back waters of river Shaiok (3½' deep) are then forded and path then ascends a ridge, where there is a high waterfall, and follows E. bank, crossing several small streams to camp.

*Camping ground.*—Plentiful.

*Fuel.*—Plentiful.

8 ULGULUK.. .. 15 m. (5¼ hrs.). Path follows stony river bed  
 ——— (14,800') and at 2 hrs. crosses a small stream. At 3½ hrs. the river is left, and two cols ascend (20°) to 14,350' and gradually up to 14,950', whence river is again seen, with rocky island (800 yds. long) amid sand banks.

*Camping ground.*—In open valley. (There is a better camp 1½ hrs. on).

*Water.*—Ample.

*Fuel.*—Ample.

*Grazing.*—For 100 animals.

9 KATAKLIK .. 25 m. (12¼ hrs.). Path crosses stream 8' wide, at  
 ——— (15,300') bottom of a deep gorge and ascends a low col, passes a stone shelter and climbs steadily to 15,200'. The lower slopes are quite open. Another small col is crossed and an open green space (200 yds. by 20 yds.) reached at 1½ hrs. This is a better camp site than last stage. Track continues to the edge of a precipitous ravine (15,400') leading to river, and descends through big boulders and heavy sand to bed of river Shaiok (14,600'), which is here 600 yds. wide (1 m. ?) and full of sand banks, at 2 hours 50 minutes. Path runs thence along the foot of cliffs, very stony and bad going, turning (at 4½ hrs.) into a side *nullah*. Track descends and follows tributary (50 yds. wide), crossing an excellent bridge a mile on (20 yds. × 10') ascending a steep cliff, reentering Shaiok valley at 5½ hrs. At 7 hours a grey, rocky spur is crossed; a short distance on the path has been carried away by a land slide, and there are big glaciers on W. bank of river which is crossed by ford, difficult to find. At 7 hours 20 min. path descends steeply (25°) from hill into precipitous side gorge; going from here on, very bad, over hills and in river bed.



ROUTE NO. 11—*contd.*

At 10 hrs. 40 min. the mouth of Kataklik *nullah* is crossed and path continues up to right bank of same, climbing 300' overspur.

*Camping ground.*—In mouth of side valley.

*Grazing.*—Ample.

10 MURGO

.. 13 m. (7 $\frac{3}{4}$  hrs). A short but troublesome stage.

153 m.

Path leaves Shaiok valley and ascends pebbly water-course, level and open, hills easy both sides, descends very steep gorge (25°) to stream; opposite this spot is a precipice of red, yellow and blue rock. Stream 10' wide and swift.

Track descends (20°), going heavy, later easier, up hillside and across side *nullah*, ascending thence to open hillside, and down to water-courses. At 4 hrs. 35 min, the Murgu gorge is entered, the stream is crossed, and track ascends over a spur, descending steeply to confluence of 2 streams, one of which is forded and a gorge entered, and river crossed. The river is here 20 yds. wide, 4' deep and very swift. Loads and animals have to be hauled across by ropes. The river has to be crossed several times in this gorge, which eventually opens out and the frequent crossings necessary become easier.

(Here Route No. XIV is joined.)

*Camping ground.*—For one brigade.

*Fuel.*—Scarce.

*Grazing.*—For 50 animals.

## ROUTE NO. 12.

*Nil.*

## ROUTE NO. 13.

FROM AKTAGH TO KARGHALIK *via* YANGI DAWAN AND TUPA PASSES, UPPER TIZNAF R, AND KUGIAR. (INVERSE).

202 miles.

14 stages.

*Authority.*—Yarkand Mission 1873-74 (partly from native information); Bower, 1889; Captain Shuttelworth, 1908.

*Epitome.*—This route avoids the difficult Sanju pass, but is only practicable for caravans in winter, when the upper part



ROUTE NO. 13.—*contd.*

of the Yarkand and Tiznaf rivers are low and frozen. It is however, thought to be the best route from Yarkand to Leh. It formerly fell into disuse owing to the depredations of the Kanjut robbers.

*Camping grounds.*—No information.

*Water.*—Plentiful.

*Fuel.*—Available at most stages.

*Fodder.*—Generally good grazing.

*Supplies.*—Nil.

No. of stages and total distance.	Details.
1 20 m.	BESHTARIK .. 20 m. At 3 m. leave the cultivation and pass over a wide gravelly waste and arid desert. At Beshtarik there are 8 or 10 huts.

NOTE—Route 13 (1).—*From Beshtarik to Shahidulla via the Kilik Pass (Kilian?).*

*This route may be a combination of routes 13 and 14 as far as the Azghana; whence the track may go to Shahidullah via the Kilik pass instead of the ordinary route via the Kilian pass.*

*According to an account given to Captain Trotter in 1893, there are 10 marches, namely, Balerak Turba, Akchik, Takma, Tupa Dawan, Azghana, Kilik Dawan, Larcha Ya Tuba, Gor Jilga, Mazar Khoja and Shahidulla.*

*Grass and Fuel are to be found at every stage. The distance can be traversed by a horseman in 5 days. This route is not now in use, but can be made practicable for ponies.*

*Minor Through Route.—contd.*

2 32 m.	YOLARIK .. 12 m. Road crosses a wide wind-swept desert, the Beshtarik Dasht. It consists of coarse sand traversed by gravelly ridges. Yolarik is a long stretch of farmsteads on the course of a small river.
3 45 m.	KUGIAR .. 13 m. Cross the wide, shallow pebbly water-course and a high ridge of loose sand. From m. 6 ascend the Kugiar Gully.

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## ROUTE NO. 13—contd.

- 4 AK MASJID .. 24 m. Cross the stream and  
8,870'. 3 m. of cultivation.  
79 m. At 6 m., the hamlet of  
Fusar is reached, and cultivation and habitations end. Thence  
up a narrow winding gully to the camping ground on the banks  
of the stream at the foot of the Tupa Dawan. Hills of shale  
resting on limestone and sandstone. Vegetation scanty.
- 5 CHIKLIK .. 11 m. In the first 6 m. ascend  
80 m. with a steep rise bet-  
ween hills of loose dust,  
to the Tupa Dawan Pass (about 10,200'). Descend a widening  
gorge by a steep dusty path to a grassy flat on the edge of the  
bed of the Tiznaf River.
- 6 MAZAR KHOJA .. 14 m. The road goes down the  
9,250' .. bed of the river which  
94 m. has to be forded 24  
times.  
Elevation 9,250'.  
Camp.—On a turfy slope on the left bank of the river.  
Fuel.—Brush wood.  
Fodder.—Grazing good.
- 7 DUBA .. 6 m. The road in winter is  
100 m. over the frozen river.  
In summer it is ford-  
able and is dangerous, from sudden floods.
- 8 GURUNZ KALDI .. 9 m. Up the stream, crossing  
109 m. 2 tributaries from the  
right. Camp on a tur-  
fy slope. Elevation 11,900'.
- 9 CHIRAGH SALDI .. 11 m. Up the Tiznaf river.  
120 m. 8 m., cross a project-  
ing spur round which  
the river winds.

N. B.—There appears to be some confusion here, or there is more than one Chirag Saldi. According to Captain Younghusband, Chirag Saldi is west of Kulanuldi and not N. as here described. Probably this Chirag Saldi is the C. G. of Tokanak vide Route 2, stage 21.



ROUTE NO. 13—*contd.*

- 10 KULANULDI ... 11 m. Ascend easily to the top of Yangi Dawan (15,800') at 3 m. Descent easy for 2 m. At 5 m. a gully joins from the left. *Route No. 2 is probably entered about here.* Down a narrow, tortuous and deep gorge, which is blocked till June by a glacier which melts away in the next month.
- 131 m.
- 11 KUGART AGHZI .. 15 m. River has to be forded 5 or 6 times.
- 146 m.
- 12 KASHMIR JILGA .. 25 m. Through a long stretch of brush wood called Kirghiz Jangal and an alternately widening and narrowing valley. At 17 m., pass the ruins of an outpost fort known as Nazar Beg Kurghan.
- 171 m.
- 13 KHAFALIANG .. 11 m. The road is good all the way. The valley gradually extends between two cliffs running from E. to W. as far as Khafaliang. The latter is a halting place at the junction of 2 branches of the river. It is called *Loongpa* by the Tibetans and *Khupulagsse* by the Turkis, all its three names meaning *north of a pass*.
- 183 m.
- Fuel.*—Procurable.  
*Fodder.*—Grass procurable.
- 14 AKTAGH .. 20 m. The road leads up the Raskam. The channel of which was filled with snow in June 1874.
- 202 m.

## ROUTE NO. 14.

FROM SHAHIDULLA TO BORI *via* KILIAN PASS  
(INVERSE).

114 miles.

10 stages.

*Authority.*—

*Epitome.*—This route is used in the summer for traffic between Karghalik and Aktagh. In winter when the upper waters



ROUTE NO. 14—*contd.*

of the Tiznaf and Raskam are low and frozen over, the route from Kugiar and Kulanuldi is used. The route is practical for pack transport, but the Kilian pass is very difficult for laden ponies, and yaks are generally used.

*Camping ground.*—Limited.

*Water.*—Plentiful.

*Fuel.*—Scarce.

*Fodder.*—Scarce. Grazing generally good.

*Supplies.*—Nil.

No. of stage and total distance.	Details.
1	HASAN BUGRA .. 13 m. A rest house and a small village.
13 m.	
2	KILIAN .. 12 m. The road passes Sazah on the borders of the Dasti-i-Bora at 8 m.
25 m.	7,000'.
	and immediately afterwards the Kilian river is forded. Kilian is a large village with a market and a school. <i>Kilian is the last Chinese post.</i>
3	KARCHUNG .. 5 m. The road crosses the Yarkand plain.
30 m.	
4	URPULIK .. 12 m. The road is good in the defile of the Kilian valley. Cross
42 m.	the Kilian river by a wooden bridge at 10½ m.
5	CHIZGANLIK .. 9 m. The road ascends the narrow valley. Cross-
51 m.	ing the stream several
times.	

NOTE A.—*From here a route strikes off to Sanju.*

6	CHADUR TASH .. 22 m. 4 f. The road goes up the valley, passing Khitai Tam, where there is an old Chinese boundary pillar at 15 m. Chadur Tash is a halting place in fine pastures on the N. of the Kilian pass.
73 m 4 f.	



ROUTE NO. 14—*contd.*

7 KILIAN PASS .. 15 m. Reach the summit of the pass at 13 m. (17,123'). The descent is difficult and stony. This pass is a very difficult one and very steep, and laden ponies can only be taken over it with difficulty. The usual custom of traders is to hire yaks from a neighbouring camp of Wakhis. Khoten Bhai Kargill is about 6 m. and Shaks gum at about 8 m.

8 BUSTON .. 7 m. 4 f. A halting place in the Kilian Dara.

96 m.

9 GRUNJKURLIK .. 9 m. Descend gradually to an old fort (Sanjū Kurghan) and at 4½ m. quit the Kilian defile. At 6 m. cross the Togha Su. This river bears an especially bad name, as, owing to the stones at the bottom being very large, it is difficult for horses to keep their legs. *Camels should be hired from the local Kirghiz in order to cross the Togra (Togha) Su and the Karakash. Both these rivers are considerable obstacles in July.*

10 SHAHIDULLA .. 9 m. Road goes along the left bank of the Karakash river, which is crossed twice between Grunjkurlik and Shahidulla. The river does not present any great difficulties (August) though earlier in the year ponies are sometimes carried away. Shahidulla is now practically abandoned. Suget fort near Shahidulla is now a Chinese outpost; near it there are several miles of cultivation, a mineral oil spring is reported to be at Gulbacher in the Karakash valley, about 15 miles from the fort.

*Fuel.*—Tamarisk and scrub.

*Grass.*—Plentiful.

*Supplies.*—About 10,000 lbs. of barley are obtainable at Suget fort near Shahidulla, on notice being given to the Chinese Ssu-Yeh there.

NOTE.—There are three routes from Shahidulla to Leh, via the Lingzi Thang plains and Chang Chenmo. They are respectively 313, 380, 372 miles long. The shortest is probably the best. They are little used, because, in addition to the intense cold, the extreme elevation at which the traveller has to remain for so many marches.



ROUTE NO. 14—*contd.*

*exhausts the animals; and water and fodder are in many places very scanty. See Epitome to Route XIV, Sec. No 1. The best route from Suget fort to Leh is XIV, XIV (1) or XI via upper Shaiok (Shyok) (See Route No. 11).*

## ROUTE NO. 15.

FROM SHAHIDULLA TO KERIA *via* THE BABA HATIM PASS.

In two Sections as under—	Miles.	Stages.
Sec. 1. From Shahidulla to Baba ? Hatim Pass <i>via</i> Portash and Abdul Ghafur Langar.	?	7
Sec. 2. From Baba Hatim Pass to Keria <i>via</i> Polu.	100 $\frac{1}{4}$	12

Total stages .. 19

SEC. NO. 1. FROM SHAHIDULLA TO BABA HATIM PASS *via* PORTASH AND ABDUL GHAFUR LANGAR.

? miles.

? stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—Fair path as far as Abdul Ghafur Langar.

No. of stage and total distance.	Details.		
1 BILAKSHI .. ..	..	..	Route apparently goes E. to Bilakshi.
2 KANGSHEWAR .. ..	..	..	<i>Via</i> Portash.
3 CAMP .. ..	..	..	
4 ABDUL GHAFUR LANGAR.	..	..	Along Karakash river, as far as Abdul Ghafur Langar.



ROUTE NO. 15---*contd.*

5	AHJI LANGAR	..	..	
	(14,695').			
6	CAMP	..	..	Over Khitai or Johnson Dawan, 16,505' S. E. to Camp.
7	CAMP	..	..	By salt marsh to Camp. Over bare gravel slopes C. G. 18,577' lying about 2½ m. N. of salt lake, lat. 35°20' N., long. 79°80' E. From here no more stages are shown. Route continues N. of Lake Lighten, lat. 35°10' N. long. 81 E., and thence N. E. to Baba Hatim Pass.

## ROUTE NO. 15. Sec. No. 2.

FROM BABA HATIM PASS TO KERIA *via* POLU.

100 miles 2 f. 22 yds.

12 stages.

*Authority.*—Captain W. T. Lanyard, 1905; C. P. Skrine, 1923 (from Polu to Keria).

*Epitome.*—Barren inhospitable country, of rocky mountains fit for wild animals only. Grass which is scanty and of a coarse quality, dies down towards August. This is an important route as being the only route from Western Tibet through the Kuen-Lun, for a distance of 240 m., to Polu and the Khotan and Keria Oasis.

No. of stage and total distance.	Details.
1	AKSU LA CAMP at 3 m. 2 f. March down the foot of Curzon Range. valley over good 3 m. 2 f. (12th October 1905.) going, and camp at (Ht. 16,700'). the foot of the pass over Curzon Range on the North side. Grass is plentiful, and water is obtained from a small stream flowing from the Northern Mountains.



ROUTE NO. 15—*contd.*

2 AKSU RIVER (13th 8 m. 0 f. 22 yds. This is a  
 ——— Oct. 1905) (Ht. 16,250') short march as the  
 11 m. 2 f. track could not be  
 22 yds. negotiated in the same

day, unless it was certain that a camp is close on the other side. Likely to have snow on this march. The route zig-zags up the pass which is clearly seen above camp. It is very steep and rocky and the animals have frequently to stop to get their breath; loads have also to be readjusted. To the top of the pass was 1 m. 2 f. and it took the ponies 1 hr. 20 minutes to reach there. Yaks sent on 2 hrs. earlier so as not to block the way. A larger number of animals would take a very much longer time. The actual ridge of the pass lies N. and S. The descent on the far side is easier, that is to say less steep. The track leads down a rocky gorge which is rough going. This gorge or water-course, at times of thaw, gradually bends north and was followed until camp at the 8th mile. There the water-course has opened out. The camp is under shelter of the western bank. There is a little grass and good water. This camp though not the same level as the last, is considerably colder. The pass crossed in this march would be a very serious obstacle to any large train of pack animals; a day's work by 2 companies of pioneers removing rocks and cutting zig-zags, would, with no great difficulty, improve the ascent very considerably.

*Fodder.*—Burtsa is obtainable.

3 GOO GOOT PLAIN. 11 m. 5 f. The direction is  
 ——— 14th Oct. 1905. (Ht. N. N. W., along the  
 22 m. 7 f. 15,450'). west side of the river  
 22 yds. bed. At the 1st and

2nd miles respectively large water courses come in from the W. and E. thus increasing the river bed which at the 3rd mile is 100 yds. wide. At this point the route drops into the river bed by a very steep descent. Here there was considerable difficulty with the pack animals. At 7th m. the direction is N. W. and leaves the river. The country rises gradually. At the 9th m. the route goes over a small pass, the height of which is 15,800'. From here the route descends to camp, which was at the commencement of a big open plain, under cover of a solitary mound on the west side. There are 2 water courses near but, in 1905, both were dry.



ROUTE NO. 15. SECTION No. 2—*contd.*

*Water.*—Was not obtainable even after digging in these courses. Some patches of snow afforded a little water.

*Fodder.*—Grass and burtsa are both plentiful.

4 NEAR ACHIK KUL. 10 m. 7 f. The direction for  
 ——— (15th Oct. 1905) (Ht. the first mile is N. N.  
 33 m. 6 f. 15,200'. W. then turns left-  
 22 yds. handed round the  
 base of a hill and continues W. N. W. From this point about  
 3 m. to the S. W. is a lake, Ulug Kull (lake) about 3 m. long  
 by 2 m. wide. Direction N. E. by S. W.; water brackish, hidden  
 from the main route by intervening high ground. To the  
 S. E. of this lake are magnificent snowtopped mountains with  
 fine grass stretching from the shores of the lake, on the south  
 and south-east side, to their base. The north side of the lake  
 is bare of grass. The route continues W. N. W. over an abso-  
 lutely barren country. Continual hillocks and heavy sand  
 make the going bad. At about 7 m. the route passes along  
 the S. side of Lake Achik Kull, about 4 m. long and about  
 1½ m. wide. Direction E. and W. At the eastern end of lake  
 water is slightly brackish, but is fresh at the west end. It  
 is of irregular shape and bends southward at its western end.  
 Along the southern side of this lake the going is irregular, rising  
 and falling over small hills of sand, with a peculiar outcrop  
 of black rock. In the hollows near the lake, on this south side  
 grass is obtained.

*Camping ground.*—Is at the west end of the lake in a sandy  
 hollow, where the ground is more level. Here a shallow water-  
 course enters the lake.

*Water.*—Is fresh.

*Fodder.*—Fair grass and burtsa is available at hand and a  
 small lake, about ¾ m. long, and ¼ m. wide, named Sara Kul  
 is about 1½ m. southwest of camp. This large valley or plain  
 lies east and west and is about 20 miles long and 7 to 10 miles wide  
 at times. In Captain Deasy's report it is described as "barren  
 and waterless." Mostly in the plain it is so, but at the last  
 camp was grass. Also along the southern shores of Achik Kull  
 is a considerable amount of grass. Some miles to the west  
 grass is also visible on the lower slopes of the mountains.



ROUTE NO. 15. SECTION No. 2—*contd.*

5 ROONG LA (16TH ..13 m. 5 f. Direction is N.  
 ———— Oct. 1905). (Ht. N. W. and for 1½  
 47 m. 3 f. 15,300'). m. is level. From the  
 22 yds. appearance of the ground

this portion after the spring thaw is evidently under water. The route then steadily rises at an even gradient, over shaley soil which is devoid of any vegetation. At the 8th m. the ground becomes broken and dry water-courses from the mountains are met. At this point reconnaissance for a pass over the mountains and find one close by, which reached in 9 miles, 17,000'. The ascent to this pass is very difficult and almost impossible for pack animals. There is a better and an easy pass about 2 miles further along the foot of the mountains. It follows the direction of a water-course, here debouching from the mountains. This pass was used by the caravan. At about 12 m. after an easy ascent the route suddenly descends. Looking down the far side of the mountains, one seems to look down on a ravine or collection of ravines, like a bottomless pit. Snow lay at times to a depth of 2' on this northern slope which made it very difficult to find a track. The descent is very steep indeed, and broken by rocks and small narrow gullies. It drops 1,000 ft. in an hour and the pace was only crawling.

*Camping ground.*—Is in a small side *nullah* at 13½ m., where there is room to pitch 3 tents with difficulty.

*Water and Fodder.*—Burtsa is plentiful, but grass or water at the time deficient.

This march occupied 9 hrs. Even with the amount of snow there was at the time, it was very hard to find a route and once off the track it is difficult for animals to regain it. A heavier fall of snow would make the passage impossible unless previously prepared by pioneers. It was noticeable that the yaks, though rather behind the pony transport at the commencement of the pass, were the first to come into camp. In ordinary marching they fall far behind, but at high altitude over bad going and deep snow, they will work better than ponies.

6 ZOUBECHIE ..10 m. Direction is a little N.  
 ———— (Ht. 12,400'). of E. down the gorge  
 57 m. 3 f. 22 yds. over rough but better  
 going than the last portion. The snow was only in patches.



ROUTE NO. 15. SECTION No. 2—*contd.*

At about the 4th m. is met a large water-course 100 to 150 yds. wide, which follows N. N. W. In it was a good flow of water, which was most timely for the animals, who had been without water for over 24 hrs. Here were met 3 natives, the first human beings met since Pobrang. The route follows this water-course and for a short way the going is much better. *Near here a large valley joins in from the west, up which is a marked path and many signs of traffic.* Soon the main valley closes to a narrow gorge, and the going becomes of the very worst. The stream which falls sharply in a succession of rapids and small falls, winds in and out of large rocks and has to be continually crossed. This gorge winds continually and is never for 50 yds. in the same direction. It varies in width from 30' to not more than 50 yds. The sides, of the most jagged description, rise sheer up to 18,000' and more. The animals had to crawl down and round rocks as none but a Ladak pony could do.

*Camping ground.*—At a little more than 10 m., reconnaissance ahead of the caravan found a patch of grass on a small piece of fairly level ground some 50' above the stream. The caravan arrived just short of this patch shortly before dark, and it was impossible to get up there and unload in the dark. There are at the 10th m., in the side of the gorge, some old caves which are former gold worker's excavations. In these passed the night. There is no room in river bed to pitch a tent. It was a confused mass of animals and packs on a rough ledge between the sides of the gorge and the stream.

*Fodder and Fuel.*—No grass or fuel were available.

7 GOLD HOLE CAMP. 1 m. At about 300 yds. before  
 ——— Hr. 12,300'. the spot where we  
 58 m. 3 f. 22 yds. had spent the pre-  
 vious night is a track out of the river bed. This had been  
 missed owing to the late hour and straggling animals. This  
 track is the route to be followed. All loads had to be taken  
 off, hand-carried out of the river bed, and loaded on the track  
 above as the animals could not do the short steep rise with loads  
 on. Once on to this track it is a fair though steep zig-zag rise.  
 The path has been constructed to a certain extent by the people  
 of Polu who come into these mountains in the summer to work  
 for gold. After a  $\frac{1}{4}$  m. is a rock by the side of the path. With  
 loads on, the path is here impassible as the animals would be



ROUTE NO. 15. SECTION No. 2—*contd.*

knocked down into the ravine below. Consequently all loads had to be removed and reloaded when the animals had been led round the rock. There are 3 similar obstacles in under a mile, so loading the animals was impossible. Everything had to be man-handled. At 1 m. the hill sides are of a more gentle slope and as the men were done up, having been carrying loads for over 4 hrs., camped.

*Camping ground.*—There is a shallow *nullah* in which tents were pitched.

*Water.*—At the time was got from the old river bed some 200' below camp. It can be reached by a steep track.

*Fodder.*—There is some sparse grass up the valley behind camp and a little *burtsa*.

*Note.*—This march, with a little pioneering, at places where rocks interfere with loads, could be much improved. The first  $\frac{1}{4}$  m. is a steep but fair zig-zag path and then the path descends by an easy gradient to where the camp is. At this camp met the Beg of Polu, who with a small party of men had been up in the mountains searching for gold. They use donkeys as pack animals in the mountains and these, with small loads can get round obstacles which our larger animals and loads were impeded by. All this mountain district is much worked for gold by the inhabitants of Polu and Keria. Numerous excavations of past workings are seen in the sides of every stream bed and ravine.

8 KALUNGRI ...7 m. Route throughout the  
 ——— (19TH OCT. 1905). day follows the line  
 62 m. 3 f. 22 yds. (Ht. 10,400') of the gorge which  
 has been traversed for the last 3 days. From stage 7, 2 tracks  
 lead down to the river bed. The upper one, though for a  $\frac{1}{4}$  m.  
 a steep climb before finally descending, is more practicable  
 for pack animals. On reaching the bottom the track winds  
 down the gorge over bad but better going than formerly. The  
 stream is continually crossed. At about  $3\frac{1}{2}$  m. the track rises  
 very abruptly with an awkward turn to cross a projecting bluff  
 over the stream. All bulky loads have to be removed and  
 manhandled to manipulate this turn. Crossing over this bluff,  
 the track again descends into the river bed. The descent is  
 very steep and difficult. Then at once the path rises to cross  
 another similar bluff to the top of which is  $4\frac{1}{2}$  m. This ascent



ROUTE NO. 15. SECTION NO. 2—*contd.*

is worse than the former one, and loads have again to be carried to the top. Descending again to the river bed the going improves and camp is on a fairly level ledge just above the stream, which is now some 10—15 yds. wide, and in places is 2 ft. deep.

*Fodder.*—Here the gorge is more open and there is a little grass.

*Fuel.*—Is obtained from a meagre thin scrub growth.

*Note.*—Just below the first bluff crossed in this march, met by 15 men and 15 donkeys which had kindly been sent by the Polu Beg to assist. It was most timely as the animals and caravan men were nearly worn-out and to get on to Polu would have necessitated either a stop and rest, or leaving most of the loads to be fetched at a future time. These men and animals enabled the party to get through that day.

9 POLU. (20TH OCT. 1905). 13 m. The route continues  
 ——— (Hr. 8,300'.) down the gorge being  
 76 m. 3 f. 22 yds. mostly by the side of the  
 river. The gorge is now more open but still the going is strewn with boulders and the river has to be frequently crossed from side to side. The route crosses a few projecting bluffs over the river, but these do not offer the same difficulty as former ones. The loads have not to be removed. At the 6th m. are passed 3 huts. They are named Lungri. The track bearing N. E. here again rises over a very steep bluff some 30' high. On descending the far side were seen some 20 cows, a small irrigation channel and a patch of cultivation. The valley now opens out and the mountains assume a more rounded form in place of their former extremely broken and jagged formations. In the distance, about 1 m. away is seen a clump of trees. These are the first seen since Tangtze. Near these trees are 2 huts. Here the path bears eastward and leaves the river bed which has been followed for so long. The path leads by a small steppe over the eastern ridge. Long coarse grass is met about here on the hills sides. The mountains all round now are smooth shaped and undulating like English downs. They are covered with a scant rooty vegetation dried up in October. This affords grazing for sheep and cattle. Continuing eastward the path descends gradually down a valley, the direction of which is N. E. and S. W. At the 13th m. the village of Polu is reached. Polu is situated in the valley mentioned on the higher ground overlooking the river which flows on the north side. At this time



ROUTE NO. 15. SECTION No. 2—*contd.*

there were some 50 odd families. The houses are flat topped and built of mud, and plaster; all single storied. The main valley is cultivated for about 4 m. in length and  $\frac{1}{2}$  m. wide, mostly on the right bank of the river. A valley, which joins in above Polu, from the south, is cultivated for about 2 m. on either side of its stream. In it are scattered dwellings. At Lungri which is about  $6\frac{1}{2}$  m. up the valley above Polu is also a strip of cultivation about 2 m. long. The crop raised is mostly barley and is considerably in excess of that required for local consumption. Owing to the small amount of rainfall in Polu, crops are irrigated. Rain falls in uncertain and very often small quantities about July. There is a fair number of trees in the valley; the hills are bare of such. Large numbers of cattle, ponies and sheep are supported by the grazing on the adjoining hills. At the time these were owned by the inhabitants of Polu and adjoining hamlets, about 500 ponies and donkeys, 2,000 sheep and about 2,000 cows, besides half-bred cattle (zoe) used in the fields for ploughing, threshing, etc. The ponies are of a good strong stamp about 13.2 hands. In the summer months while the crops are ripening the inhabitants go in small parties into the gorges, etc., of the Kuenlun and there work for gold. The presence of gold near them and the amount of cultivation, cattle, etc., give the people of Polu an air of prosperity above that usually seen in natives. A Beg, who is a Turki, is in charge of the village and district. He is under the Amban of Keria but appears to be left pretty well alone. This Beg used to collect annually the equivalent of about Rs. 1,000 from the district as a gold tax, and paid the same to the Chinese Amban in Keria. Ponies could be bought for about Rs. 40. For donkeys Rs. 10 paid.

10 KURUP RIVER ..19 m. 6 f. The general direction of the march  
 ——— CAMP (KERIA). is N. W. On first  
 86 m. 1 f. 22 yds. (Ht. 6,500'.)  
 leaving the village the path drops to the river and crosses by an easy ford to the left bank. The path then bears N. N. E. and rises by an up and down route to a point about 300' above the river bed. From then on, the direction is N. W. Continuing to rise at the 3rd m. the highest point is reached. The path here goes over a small pass through a high bluff at the bend of the river. The sides of the river are



ROUTE NO. 15. SECTION NO. 2—*contd.*

steep cliffs which make the river bed inaccessible from above. The path descends from here and at the 8th m. is near the edge of the river. The banks here are still 50—100' high, but there is a path down to the water. This is a convenient place to camp at as the water can be reached. Coarse grazing and hardly two feeds can be obtained from small scrub bushes. From here onwards the path is at a distance of about  $\frac{1}{2}$  m. from the left bank of the river. Sand hills continually hide the river bank. The going so far has been sandy with at times stones. Now the sand is deep and the country assumes a desert-like appearance. There are many knolls on which grow clumps of scrub of the appearance of spruce.

*Camping ground.*—At 19 m. 6 f. c. g. of Yol-arish is reached. It is not a good place to camp at, as owing to the steepness of the river banks (here about 400' high) animals cannot get to water. A man, however, can here get down. It would be better for a large party to push into Bash-laska, 5 m. further.

*Fodder.*—There is no grass.

*Fuel.*—Is obtained from the scrub, which ponies will eat in the absence of proper fodder.

*Note.*—This march is heavy for 3 m., is a steady rise and then the route is continually over undulating sand. Owing to the steep banks, the river is only to be reached at the 8th m.

## 11 BUGHAZ LANGAR.

————— Ht. 5,700.'

95 m. 5 f. 22 yds.

9 m. 4 f. The route follows the left bank of the river which now is about 50 yds. wide and the water flows right up to the base of the banks which are perpendicular and about 40' high. At about the 2nd mile the river bed opens to about 250 yds. wide and the river flows in various channels therein. The banks are about 10' high. Shortly the river opens still more and the banks are quite low. The river thus irrigates a broad track of country, constituting the Bashlaika oasis, mostly on the right bank. The path winds along the left bank and at the 7th m. crosses by an easy ford to the right bank and follows along it. At 9 $\frac{1}{2}$  m. is the small village of Bughaz Langar. Camp is on the North side of it.

*Supplies.*—For a small party are plentiful; eggs and fowls, also grain for animals.

*Fodder.*—Grazing is handy and there are extensive orchards, also some bushes by the river.



ROUTE NO. 15. SECTION NO. 2—*contd.*

12 KERIA                      ...24 m. 5 f. The direction is N.  
 ———— Ht. 4,600'.                      At the 4th m. the route  
 100 m. 2 f. 22 yds.                      crosses a branch of  
 the river, at the time 1' deep. Here the river beats away  
 N. W. Its course is discernible by a belt of trees along its  
 banks. It flows some 2 m. to the left of the route. From here  
 the path leads over a stony and sandy plain. At about 6½ m.  
 cultivation is met. The path which is now level and good going  
 leads through a very fertile strip of country. There are many  
 well built farms and smaller dwellings. All kinds of cultivation  
 are to be seen, maize, melon patches, vines, and plum trees  
 being the most noticeable. This oasis continues for about 3 m.  
 and then the route is N. E. over a stony and sandy plain. At  
 about the 18th m. cultivation is again met and is similar to the  
 last. The direction is N. and passes houses and small hamlets.  
 One can camp at 20 m. 6 f. near a group of buildings where water  
 is obtained from wells and irrigation canals, and supplies of all  
 kinds are plentiful. Cultivation is rich along the banks of the  
 Keria river, as it affords excellent means of irrigation. At  
 a short distance however from the banks the country is desert.

For last 3½ m. to Keria the route is N. and leads through  
 a cultivated and well populated country. The going is flat  
 and good. The dwellings gradually become closer together.  
 At the 3rd m. the road passed through a wooden gate and then  
 through the bazaar of Keria: there are shops of all kinds.  
 The articles for sale are mostly cloth, of which much is Russian  
 manufacture. Carpets from Khotan and all kinds of leather  
 work and saddlery for riding and pack animals have a large  
 sale. Grain of all varieties is to be obtained, maize being  
 the kind mostly seen. The Keria river flows northwards at the  
 end of the town. Beyond it to the Eastward is seen the desert.  
 N. W. and S. of Keria is cultivation.

Keria is managed by a Chinese official whose title is an  
 Amban. His jurisdiction extends East to Nia and includes the  
 gold fields of Surghak at the foot of the Kuen Lun also Polu.  
 In Keria there are supposed to be 500 Infantry and 50 Cavalry  
 soldiers. At the time there were only 50 odd, ill-fed, opium-  
 sodden men, who did duty as escorts on occasions for the Amban,  
 or were employed in various capacities about the Yamen. They  
 had arms of antique patterns.



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# FOR NOTES

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FOR NOTES

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FOR NOTES



## LATERAL ROUTES



## LATERAL ROUTES.

## ROUTE NO. I. A.

FROM TASH KURGHAN TO SHIMSHAL AKSAI  
(ROUTE NO. 1) *viâ* KURBU (ILI SU) PASS.

136 miles 2 furlongs.

10 stages.

*Authority.*—Captain Younghusband, 1889 ; Lieut. Cockerill 1894 ; Lieut.-Colonel Broke-Smith, 1922.

*Epitome.*—This route connects the Taghdumbash Pamir with the upper part of the valley of the Yarkand river. It is easily traversed by pack animals, the crossing of the Kurbu (Ili Su) pass is easy, but the fording of the Yarkand river at stage 7 is difficult.

*Camping ground.*—No information.

*Water.*—Plentiful.

*Fuel.*—Obtainable at most stages.

*Fodder.*—Generally good grazing.

*Supplies.*—Nil.

No. of stage and total distance.		Details.
1 & 2	DAFDAR	.. 38 m. <i>Vide</i> route No. I, Sec. No. 1, stage No. 4.
38m.		
3	UJADBAI	.. 11 m. <i>Vide</i> route No. I, Sec. No. 1, stage No. 4.
49m.		
4	ILI SU (11,256')	.. 17 m. The road leads over the Pamir an open plain partly of stone and partly covered with grass. At 14½ m. a road leads off to the left over the Mariong Pass to the lower valley of the Yarkand river. At Ili Su there are 3 or 4 Kirghis yutas. Large flocks of sheep and goats ; also ponies and yaks. From here roads lead in all directions over the Taghdumbash Pamir, and there is no difficulty in moving in any direction.
66m.		



ROUTE NO. I. A.—*contd.**Grass.*—Plentiful.*Fuel.*—Dung.

- 5 TOLTI JILGA .. 11 m. Up the bed of a stream and ascend at a steep gradient, prac-

77m.

ticable for laden ponies to the Kurbu or Ili Su Pass, 14,700'. Summit of the Pass is rounded and smooth and the descent is quite easy down the pebbly bed of a stream in a narrow valley. Tolti Jilga is at the junction of 2 streams, of which the Northern one leads from the Kurbu Pass.

*Camping ground.*—For one Battalion.*Fodder.*—Grass obtainable.*Fuel.*—Obtainable.

NOTE—Stages 6 and 7 below (Cf. Route I. B., stages 2 and 3.)

- 6 KHAIAN AKSAI .. 8 m. Descend the Ili Su valley. Jungle becomes a little dense and at

85m.

times obstructive. Camping ground close to a hot spring. (Cf. Route I.B., st. 2.)

*Fodder.*—Grass abundant.*Fuel.*—Abundant.

- 7 URUKSAI .. 11 m. The valley of the Ili Su becomes choked up with high jungle and

96m.

trees, which prove very obstructive to baggage animals. The stream itself is small. At the end of October it is about 10-15 yds. broad and about 1½' deep. At 5½ m. leave the Ili Su valley and enter the valley of the Yarkand river. Keep up the left bank of the river, passing at 8 m. a large patch of high jungle called Sarok Kamish. Opposite this is another large stretch of jungle with a good many trees, and all about here used formerly to be well populated. Uruk Sai is at the mouth of the Uruk stream flowing down from the S.

*Fodder.*—Grass plentiful.*Fuel.*—Plentiful.

NOTE.—There is no road down the Yarkand, as the mountains are said to close in, so that the river runs between precipitous cliffs, but there is a road leading for one march down the valley over a kotal called the Topa to a pasture ground, which is much frequented by the Kirghiz from the Taghdumbash.



ROUTE NO. I. A.—*contd.*

8 CHUNG JANGAL ... 13 m. 2 f. Patches of high  
 109 m. 2 f. jungle and grass are  
 above and at Chung Jangal. Before coming to the junction  
 of the Oprang river with the Yarkand river cross the stream  
 8 times, depth 4' and fords very difficult. *From the junction  
 proceed up the valley of the Oprang river. (Note?. The road  
 via the Oprang Pass to the Taghdumbash Pamir is still used a.  
 any rate by men on foot. It is said to be 7 marches to Karachukar,  
 and is thus 2 marches shorter than the routes viâ the Kurbu Pass).*

9 SHOR BULAK ... 16 m. Skor Bulak is near  
 125 m. 2 f. (SOKH BULAK ?) the junction of a  
 stream, 15 yards broad  
 and 1' deep, flowing down from the Oprang Pass. Up this  
 stream a road used to exist, but it seems now to have fallen  
 into disuse on account of landslips.

*Fuel.*—Plentiful.

*Fodder.*—Grass plentiful.

10 SHIMSHAL AKSAI 11 m. At 4 m. there is a patch  
 136 m. of jungle on the right,  
 called Kuram Jilga,  
 near the junction of a small stream. Ascend the valley of the  
 Oprang river, cross the stream 9 times—depth  $3\frac{1}{2}'$  to 4' and very  
 difficult to ford on account of the rapidity and strength of the  
 stream.

*Fuel.*—Plentiful.

*Fodder.*—Grass plentiful.

*Supplies.*—Nil.

*Route 2 stage 15 is met with here.*

## ROUTE I. A. (1).

*A winter track over the Oprang Pass runs from Dafdar to  
 Sokh Bulak (for the condition of the pass one must rely on  
 local information).*

1 MAZAR SULTAN ... 19 m. To Ujadbai as  
 19 m. above, then up river  
 bank of Kunjerab  
 stream. Camp near a large group of tombs and graves.

*Camping ground.*—Ample.

*Supplies.*—Nil.



ROUTE NO. I. A. (1)—*contd.**Fuel.*—Dung and burtsa.*Fodder.*—Good grazing.

2 OPRANG .. 18 m. Continue up open grassy valley to junction of Oprang and Kun-

37 m.

jerab streams. There are numerous Sarikoli encampments in this valley in the summer.

*Camping ground.*—Ample.*Fuel.*—Dung and burtsa.*Fodder.*—Good grazing.*Supplies.*—Sheep in the grazing season.

3 CAMP .. 1 m. Continue up Oprang valley open and grassy for 4½ m. then it

?

contracts and path runs on right bank for 1½ m., gentle ascent to Oprang Pass. Then S. E. down a narrow *nullah* to camp.

4 SOKH BULAK .. 2 m. (Local information. Impassable in summer owing to water. Prac-

1 m.

ticable for yaks in winter).

A path leads from Oprang over the Kunjerab pass to Hunza.

Route I.

## ROUTE NO. I. B.

FROM ILI SU (TAGHDUMBASH) TO YARKAND, *via*  
ILI SU AND SANDAL PASSES AND KULAN  
URGU VALLEY.

237 miles.

16 stages.

*Authority.*—Lieut. Etherton, 1909.

*Epitome.*—This route runs over the Ili Su Pass to the valley of the Yarkand river; thence E. crossing the divide between the Yarkand river and the Kulan Urgi valley, which it follows to the water shed between that valley and the Azgar Sai. It follows the latter stream, in a general direction of N., till the Yarkand river is again met at Khan Langar. Thence it follows the Yarkand river. The route is practicable, with great difficulty in places for mule transport, and yaks are generally used between Oprang and Hazaraz, beyond which point

M226CGS

2 E 4



ROUTE NO. I. B.—*contd.*

the altitude is not sufficient for them. Between Thais and Yarkand carts could be used.

The chief obstacles on the road are:—

- (1) The Ili Su Pass which is only crossed with great difficulty in summer, and is closed from the middle of October till June.
- (2) The Ili Su Ravine, which is generally blocked by flood in July and August, and is always difficult.
- (3) Stage 6, between Partash and Poenak, a very difficult ravine.

*Camping grounds.*—Generally available.

*Water.*—Plentiful.

*Fuel.*—Generally available.

*Fodder.*—Generally good grazing.

*Supplies.*—Scarce up to stage 13, after which plentiful.

No. of stage and total distance.	Details.
1	TOLTI JILGA .. 14 m. or 11 m. See Route I A, stage 5, for details.
14 m.	
NOTE—Stages 2 and 3, below— <i>Cf.</i> Route I. A, stages 6 and 7.	
2	ISSOK BULAK .. 15 m. 4 f. The path leads through a narrow and difficult gorge with high rocky
29 m. 4 f.	sides, for 7 m., after which the gorge gradually widens to an average width of 120 yds., with trees and grass jungle. The stream has to be constantly forded, with difficulty owing to the strong current and large boulders. At Issok Bulak there is a hot spring and a little barley is cultivated ( <i>cf.</i> , Route I. A., stage 6.)
3	SAROK KAMISH .. 7 m. 4 f. The valley narrows to an average of 40 yds. till it debouches
37 m.	on to the junction with the Yarkand river. Here there is a small clearing and room for a double company to camp. The sides of the ravine are bare and rocky. Ford the Ili Su, width 40 ft., current very strong, and continue for 2½ m., down the left bank of the Yarkand river and 500' above it. The slope of the ground is 50°. The width of the Yarkand river at the



ROUTE NO. I. B.—*contd.*

mouth of the Ili Su is 300 yds. At Sarok Kamish the Yarkand valley is 1,600 yds. wide. Sarok Kamish is a tall grass and reed jungle interspersed with trees.

*Camping ground.*—For a Brigade.

*Fuel.*—For a Brigade.

4 CAMP IN QUOTCH .. 13 m. 4 f. The Yarkand river forded in three branches and the path descends at a steep angle above the right bank to the summit of the Topa Pass, 4 m. (11,500). The summit is narrow and the surface earth and gravel. The path continues level for  $\frac{1}{4}$  m. and then descends over gravel and earth to the bed of the Quotch Kor *nullah* which is reached at 8 m. The path then runs through thick willow and occasional grass clearings to the *c. g.* in some fields cleared by the Kirghiz for cultivation of barley. The average width of the valley is 40 yds.

*Fuel.*—Abundant.

*Fodder.*—Grazing good.

5 PARTASH (KULAN .. 25 m. 4 f. The path now runs through a succession of grass clearings and willow jungle. Ample pasturage. The average width of the ravine is 70 yds., with sides sloping at an angle of 60°. At 7 m. leave the grass and willow jungle and enter a steep and narrow ravine, up which the going is laborious over huge boulders and rocks. At 9 m. reach a long grass slope 300 by 80 yds. Thence the path lies at an angle of 40°, over boulder-strewn slopes for 4 m. Thence there is a long slope over sliding shale and stones, at an angle of 32 degrees, to the summit of the pass at 6 m. The last 300 ft. of the ascent lead up to a steep and slippery shale moraine which is frozen and dangerous. The summit 17,400' is narrow and covered with a large snow cornice, width 25'. Thence there is a long and steep descent for 2,500' at an angle of 50 degrees to the rocky bed of ravine. The road for 3 m. lies over rocks and stones and then opens out on to grassy downs, over which it lies for 6 m. to Partash, which is a Kirghiz camp in the Kulan Urgi valley. The width of the valley at this point is 250 yds. Grass and willow jungle.

*Supplies.*—Some 250 sheep. Other supplies nil.



ROUTE NO. I. B.—*contd.*

- 6 POENAK .. 13 m. This is an exceedingly difficult section of the route and lies through a ravine with alternate grass and willow jungle, occasionally fording the river. At 4 m. reach the junction of the Kulan Urgi with the Partash *nullah*. Thence the road runs for 9 m. along the bank of the river, numerous deep and difficult fords being crossed. Poenak consists of 6 houses, and a few poplars and  $1\frac{1}{2}$  acres of barley.
- 89 m.
- 7 BALDIR .. 14 m. To Yaghzi 8 m. A collection of 8 houses, some apricot and poplar trees and 2 acres of barley cultivation. At this point the width of the valley is 170 yds., shut in by high, rocky mountains. Thence 6 m. to Baldir which is a large clearing with apricot and poplar trees and some 4 acres of barley cultivation. 14 houses. The river has to be forded 26 times between Partash and Baldir.
- 103 m.
- 8 FOOT OF KARA .. 7 m. Cross the Kulan Urgi river by a deep and difficult ford.
- 110 m.
- DAWAN PASS
- This is impassable for laden animals, and baggage has to be taken by coolies along cliffs above the right bank. Up to 2 m. there are occasional patches of barley and apricot trees; then turn N. E. up a narrow and stony ravine leading from right bank. Follow this for  $2\frac{1}{2}$  m. over steep slopes, the last m. over precipitous grassy downs covered with intermittent patches of firs, to the foot of the Kara Dawan Pass. The valley averages 400 yds. in width. There are 4 huts here, inhabited in summer by shepherds.
- 9 SANDAL NULLAH 10 m. The path runs over grassy slopes at an angle of 45 degrees for 2 m. to the summit of the Kara Dawan Pass. The top of this is narrow and rock-strewn. The approach is easy and passable for laden animals. The descent from the summit lies down a boulder strewn slope difficult for laden animals. Thence on to grassy downs and a further descent of 600' to the bed of a *nullah*. From here there is an ascent for 600' over a small intervening range and a long detour by the head of ravine for 2 m. to a second range. Thence down to the
- 120 m.



ROUTE NO. I. B.—*contd.*

bed of the nullah leading to the Sandal Pass. At 10 m. enter the Sandal nullah.

## 10 HAZARAZ

.. 18 m. The path leads over rocky slopes for 6 m. to the summit of the

138 m.

Sandal Pass (15,300'). The last mile of the ascent is up a steep, shale slope, rough but passable for laden animals. The summit is narrow and razor-backed, and the range to N. and S. serrated and much broken. Descend over rocks and shale for  $1\frac{1}{2}$  m. to where the path runs through a narrow grassy nullah to the junction of the Sandal nullah with the Azgar Sai. Here the valley widens out to 160 yds. At 11 m. reach a Kirghiz Camp on an open grassy clearing. Thence the path lies to the Azgar Sai, fording the stream several times by easy fords. The valley gradually widens until Hazaraz is reached. This consists of 15 houses in a cultivated clearing of barley.

*Fuel.*—Plentiful.

*Fodder.*—Grazing good.

*Supplies.*—Nil, except sheep, which can be obtained from Kirghiz population.

## 11 ZUMCHI

.. 9 m. On leaving Camp, ford the stream to the right bank and con-

147 m.

tinue down it to Zumchi. The hills are here lower, more grassy and rounded. There are 35 houses at Zumchi.

*Camping ground.*—For one battalion.

*Supplies.*—Limited. A certain amount of barley and many sheep are available. Some 100 or 150 ponies can be obtained here.

## 12 BELDIUR

.. 15 m. From Zumchi onwards the country is more thickly populated and

162 m.

cultivated wherever irrigation is possible. At  $9\frac{1}{2}$  m. ford the Azgar Sai to the right bank and continue to Beldiur. Here there is a large amount of pasturage and apricot trees. *Camping ground* space everywhere available. *Fuel* plentiful from jungle and the river bank.

## 13 THAIS

.. 13 m. 8 m. to Tar Aghzi, thence down the valley which widens to  $1\frac{1}{2}$  m.

175 m.

and is cultivated with many trees. There is good water all



MAIN ROUTE NO. I. B.—*contd.*

along in this stage for an unlimited number of men and animals. This is a large village of 175 houses. (*Cf.* Route I.C., stage 13-16.)

*Camping ground.*—Anywhere in the valley.

*Water.*—Unlimited.

*Supplies.*—Barley, sheep, cattle are plentiful.

## 14 INNIS

.. 10 m. The road runs through a wide and open valley fording the

185 m. river at intervals. There are small villages every mile or two surrounded with orchards. One of these is Oyung (stage 14 of route I.C.) At 10 m. reach Innis, a large village of 20 houses built in groves of apricot and other trees.

## 15 AKTUM

24 m. Cross a strip of desert for 20 m. to Khan Langar on the Yar-

209 m. kand river. There is no halting place *en route*, as the road leads over a dry and sandy desert. Khan Langar is a small-village of 40 houses where a *beg* lives. Supplies scanty. Water and fuel plentiful. At 24 m. reach Aktum, a village of 90 houses. Here there is much cultivation.

*Supplies.*—Available.

*Water.*—Plentiful.

*Fuel.*—Plentiful.

## 16 YARKAND

.. 28 m. The road from Aktum lies through a succession of rice fields cross-

237 m. ing numerous small streams, which are bridged by logs covered with boughs and earth.

## ROUTE NO. I. C. (INVERSE.)

FROM TASH KURGHAN TO SHAHIDULLA *viâ*  
KUGIAR AND KILIAN PASS.

357 $\frac{1}{4}$  miles.

26 stages.

*Authority.*—Lieut. Bower, 1887.

*Epitome.*—This road is practicable for loaded animals, with the exception of the Khandar Pass, stage 21, when loads



MAIN ROUTE NO. I. C. (INVERSE)—*contd.*

would have to be removed. At stage 18 the Yarkand river has to be ferried, and there would be some delay here as rafts are not kept ready: fordable in winter, probably with difficulty.

*Camping ground.*—Limited to  $\frac{1}{2}$  battalion at most stages.

*Water.*—Plentiful except at stages 12 and 13.

*Fuel.*—Scarce.

*Fodder.*—Grazing at most stages.

*Supplies.*—Nil.

No. of stage and total distance.	Details.	
1,2,3 34 m. 4 f.	SHAHIDULLA	.. Killian Pass. See Route 14, stages 10, 9 and 8.
4 34 m. 4 f.	KHOTEN BAI KARGILL	9 m. See Route 14, stage 7.
5 53 m.	CAMP	18 m. 4 f. On descending the Pass, grass is plentiful and of good quality. Continue along the Yarkand road for 6 hrs. and then strike W. up a narrow valley, about 2 m. to camp.
6 68 m.	KUSNECH	.. 15 m. Continue up the <i>nul-lah</i> , and, passing Nam-lung Mazar, arrive at Kusnech, a Wakhi camp.
7 84 m. 4 f.	KARATAGH (9,100')	16 m. 4 f. The Saragat Dawan, 14,000', one of the numerous ridges that intersect this valley, is crossed. Ascent is bad in parts and the descent is steep. At Karatagh, 3 valleys meet. Here are about 5 huts and some 3 acres of cultivation. It is the winter quarters of the Karatagh Kirghiz.
8 104 m. 4 f.	SULTAN KALICH MAZAR	20 m. The Tuzyar Davan is crossed (14,600').
<i>Fodder.</i> —Grass is plentiful.		



ROUTE NO. I. C. (INVERSE.)—*concl'd.*

- 9 IVOULONG .. 22 m. Pass the Davan Ostang, c.g., at 4 m. from Sultan Kalich Mazar and, after 8 hrs., reach Ivoulong, crossing the Tupa Dawan, 15,400'.  
126 m. 4 f.
- 10 SANNICH 18 m. Cross the Sannich Davan 16,000' a long climb, but easy on both sides and descend to the Sannich valley.  
144 m. 4 f.
- 11 AK MASJID .. 19 m. From here the best road to Ak Masjid runs over the Kichik Yul Pass (15,500') a stiff ascent and descent for laden ponies. From the summit the road runs down a narrow valley with steep hills on each side. After marching 7 hrs. the water in the *nullah* ceases and there is no more till Kugiar is reached. (C.f., Route 13, stage 4.)  
163 m. 4 f.
- 12 KUGIAR .. 24 m. *Vide* Route 13, stage 4.  
189 m. 4.
- 13 OSCHLEH (ULUSH) 20 m. From the Kugiar valley the road to the Tiznaf valley runs W. over low barren sand hills; highest ridge is 10,000'. A long tiresome march, 11 hrs., before the village of Oschleh on the Tiznaf is reached. No water during this march. (Cf. Route I.B., stages 13-15.)  
207 m. 4 f.
- 14 OYUNG .. 12 m. Another march over the low sandhills to Oyung, which lies between Thais and Innis, *vide* route I. B.  
219 m. 4 f.
- 15 THANGNE ASIE .. 14 m. For 5 hrs. march to Thangne Asie, easy going through cultivation.  
233 m. 4 f.
- 16 MAZAR URZI .. 10 m. From here the road enters a gorge. Note. Route I. C. (a). Just before reaching Mazar Urzi, the Askam Salgam *nullah* is passed up which a road leads to Mamuk in the Tiznaf valley.  
243 m. 4 f.



ROUTE NO. I. C. (INVERSE).—*contd.*

17 EGHIZARAK KURGHAN 20 m. The road now turns W. passing the village of Dongair. This stage is unfit for wheels throughout. Track lies in a valley and continues following up the Oghri Baldir stream which is crossed time and again; and which in December being hard frozen in most places is very slippery and treacherous. Several hamlets with small areas of harvested fields passed *en route*, but all of them were uninhabited in 1887. It appears that people return to them from surrounding country in February or March. Only at Enkur at about the 10th m. was found a small family in residence. Some 2 m. further from Enkur, track to Dongair and the Takhtah Davan Pass (11,900') turns to left into the Qizil Qur valley. After the first few m. from previous stage the hills become less barren and patches of good grazing are met every few hundred yards. The fort called Eghi Zarik Kurghan ( $49 \times 49$ \*, walls 12' high, built of mud and stone, base 6' thick, top  $1\frac{1}{2}$ ' thick, loopholed for musketry; ditch 5' deep, 12' wide), which is a  $\frac{1}{4}$  m. short of the stage, is now abandoned and is in ruins, and copper smelting, formerly carried on here, is no more.

*Camping ground.*—For 1 regiment.

*Water.*—From Oghri Baldir stream.

*Fuel.*—Very scarce.

*Fodder.*—Grazing excellent.

*Supplies.*—Nil.

18 SEGATLI .. 9 m. Whole stage unfit for wheels. For  $\frac{1}{4}$  m. up to ruins of Eki Zarik Kurghan track traverses back previous day's march. From Eki Zarik Kurghan to foot of Arpa Talak Pass—a distance of some 3 m.—there is a steady rise along a dry (December) *nullah*, the bed of which lies through grassy slopes. From the foot to the summit of the Pass is about  $1\frac{1}{4}$  m. and is fairly stiff. The first part of the ascent has a local designation Tupa Davan ("the muddy pass,") from the nature of its surface, as there are no stones here. The Arpa Talak (marked 12,400' on the map) is said to be very nasty in spring. The descent is steeper than the ascent and is also longer, being some  $2\frac{1}{2}$  m. About midway of the descent there is a sharp curve with a drop of a couple of hundred



ROUTE NO. I. C. (INVERSE.)—*contd.*

feet and this place goes by the local name of Tarsaj. A short distance from the foot of the Pass (on the descent side) a spring is met and the locality is known as Tash Ungur. From here to Segatli is about  $\frac{3}{4}$  m. Segatli consists of half a dozen filthy huts which are only occupied in spring and summer by people from Langar (the following stage). Spring water flows close by its source being some 500 yds. up the ravine to the right. The spring, called Chaurich Qari Maghio, is said to dry up completely when summer rains fail.

*Camping ground.*—For 2 companies in the field.

*Fuel.*—Nil.

*Fodder grazing.*—Good deal of grass.

*Supplies.*—Nil.

NOTE.—It is better, of course, to make, as Bower had done, one march, Eki Za i'k to Langar, instead of halting at Segatli, unless the Arpa Talak Pass has exhausted one's ponies or winter days being short make it difficult to go on.

19 LANGAR .. 7 m. Stage is not fit for wheels. Steady descent the whole way  
279 m. 4 f.  
Very stony and rough at places. Good deal of grass up to about half way, after which practically all vegetation disappears. At about  $2\frac{1}{2}$  m. there is said to be a spring, called Qurumliq, in the hills to right, and some  $\frac{3}{4}$  m. further on a few yellow patches high in the cliffs to right are pointed out as spots where deposits of alum are found; this place is called Zhemeqin. About  $2\frac{1}{2}$  m. onward a fresh water spring called Yamaliq is met across the track and to the left of this, high in the rocks is an oval-shaped cave said to be a shrine known as Ghar Mazar.

*Camping ground.*—None for the smallest force at Langar itself, but a few hundred yds. beyond it there is a sandy patch which can accommodate  $\frac{1}{2}$  a company, though the place may be liable to washaways and stone debris from the hills in rains.

*Water.*—Plenty.

*Fuel.*—Scarce.

*Fodder.*—Nil.

*Supplies.*—Scarce.

20 TUNG QAL'AH ..  $5\frac{1}{2}$  m. This is a very short march but the ferrying across of baggage and  
285 m.



ROUTE NO. I. C. (INVERSE.)—*contd.*

baggage animals over the Zaraf han takes some little time. In other seasons of year when days are longer one march can be made from Quruq Langar to Langar, stage 21, a distance of about  $4\frac{1}{2}$  m.

From Langar to the ferry, distance is about 1 m., the track leading to it after going over sandy patch (mentioned in previous stage) and negotiating a small gallery road not very high in the cliffs. The ferry is a flat-bottomed boat (a rough kind of pontoon) built a few years ago by Karim Beg, the Hakim of Sar-i-Kul, who generally resides at Tung Qal'ah. Capacity of the present ferry is as follows:—3 horses comfortably or 4 quiet ones at a pinch, or 2 camels, or 30 men without their kit, besides the 2 puntsmen: or 12 to 14 mds. load. Trip across and back takes about  $4\frac{3}{4}$  minutes, about  $114\frac{1}{2}$  yds—with trained and technical troops duration of trip can no doubt be shortened. The existing ferry is said to have cost roughly 80 rupees for labour and metal parts alone, the planks having been supplied free by villagers. It took 20 days to build, 3 men working. Wood for planks for 6 ferries of dimensions of existing one, available at Oighareq (just above Tung Qal'ah) which is the property of Khuda Aman Beg of Khan Langar (*see* stage 4 of Route I. D.). The wood after being cut ready into suitable boards can be conveyed on yaks (available in Tung) and would take, according to local opinion, 30 to 36 hours to reach the ferry head; in summer when the Tung river is in flood the boards could be floated down and would get to their destination in about 24 hours, provided they are properly manned at awkward corners. Karim Beg (a Maulai) said if he could secure the requisite material he would build a rope bridge a few hundred yds. above the present place of ferry at a narrow bend of the river where a dry (December) *nullah* comes in on the right bank and the spot is known as Qauraliq (blind alley). Leaving ferry, track leads up to a gallery road which is about  $\frac{3}{4}$  m. long and which is in its present condition not very easy for laden ponies though it appears local camels with loads often use it. After gallery road ends, the track crosses the Tung river and turns to right entering the Tung valley. The Tung is an insignificant river in winter but apparently in summer it is generally unfordable except in the early mornings. The valley of Tung is fairly fertile though according to natives the river is gradually encroaching on available land.



ROUTE NO. I. C. (INVERSE.)—*contd.*

*Camping ground.*—None for the smallest force at Tung Qal'ah itself, but between it and point where Tung river joins the Zarafshan 2 regiments can be accommodated in separate camps.

*Water.*—Plenty.

*Fuel.*—In fair quantities.

*Grazing.*—Good.

*Supplies.*—In fair quantities.

The whole of this stage unfit for wheels.

NOTE.—*Tung Qal'ah.* The whole place goes by the common name "Tung."

21 LANGAR .. 9 m. Unfit for wheels throughout. A few solitary huts and

294 m. patches of good grazing passed *en route*. The Tung river forded several times. Nearing the end of the march the Tung valley is left and the valley called Darreh Kachek Istang is entered to the left. The stream Kachek Istang said to come from Chupan Jurab, joins the Tung river just below Langar. Eight Maulai families at Langar and a mazar.

*Camping ground.*—For 1 company in the fields.

*Supplies.*—Nil.

*Fuel.*—Scarce.

*Fodder.*—A little grass.

22 GHUCHASHMAN .. 7 m. In seasons other than winter, this and the previous march can be

301 m. combined. The Kirghiz element has completely disappeared from Tung valley and vicinity. The few who remained behind have intermarried with local inhabitants and are hardly distinguishable by their features. Whole stage unfit for wheels. Beyond Langar the Tung valley has a local river, namely Ulugh Istang. A few small patches of grazing and solitary huts passed *en route*. There is a fresh water spring at the stage and  $\frac{1}{2}$  dozen huts (uninhabited in winter).

*Camping ground.*—For  $\frac{1}{2}$  company in fields.

*Fuel.*—Available from wild trees and jungle growth.

*Fodder.*—A little grazing.

*Supplies.*—Nil.



ROUTE NO. I. C. (INVERSE.)—*concl'd.*

23 QUSHQARBAI BUI  $7\frac{1}{2}$  m. Unfit for wheels; extremely rough track and dangerous crossing  
 308 $\frac{1}{2}$  m.  
 of frozen river in winter. Steady rise whole way. Three nasty though short lengths of gallery road.

*Camping ground.*—None for smallest force.

*Water.*—Plenty.

*Fuel.*—Plenty, procurable from short distance from wild trees *en route*.

*Fodder.*—A little grazing.

*Supplies.*—Nil.

24 CHAGHARGAH ..  $8\frac{1}{4}$  m. Unfit for wheels. Difficult to judge distance over the Kandar Pass but time occupied faithfully recorded. Almost immediately on leaving previous stage ascent of Kandar Pass begins, but it is easy until about half way after which it gets very steep and very stony. It took 4 hours and 50 minutes to reach the summit and calculating the pace at  $1\frac{1}{2}$  m. an hr. the ascent would be roughly 6 m. The descent is easy and is not more than  $1\frac{1}{3}$  m. long which took 23 minutes on a yak going fairly, say at the rate of  $3\frac{1}{4}$  m. (over the Kandar Pass between 1,600 and 1,700' high).

*Water.*—Plentiful in Shaidan.

*Grazing.*—Good grass at Shaidan.

*Fuel.*—Burtsa at Shaidan.

25 WACHA (UCHI) .. 12 m. Descend the valley of the Wacha or Uchf river, a small stream that joins the Tash Kurghan river at Baldir. Cultivation is met with but trees are scarce. There is a flimsy sort of fort in the valley called Sharan Kurghan.

26 TASH KURGHAN .. 20 m. From this valley the Tash Kurghan valley is reached by crossing the Ugariat Pass, 14,400', very easy, and descending to a place about 6 m. above the Tash Kurghan fort.



## ROUTE NO. I. D.

FROM EGHI ZARAK KURGHAN (ROUTE I.-C., STAGE 17) TO KOK ROBAT (ROUTE, XII, STAGE 4, *viâ* KHAN LANGAR (INVERSE).

108 $\frac{1}{4}$  miles.

8 stages.

*Authority*.—Captain A. Samud Shah, 1921.

*Epitome*.—Stages 5-8, *c.f.* Route I. C., stages 17—21.

No. of stage and total distance.	Details.
1 QARAL JASH 15 $\frac{1}{2}$ m.	.. 15 $\frac{1}{2}$ m. Follow main road Kok Robat to Yarkand for about 4 m. till Sai Langar is reached; then strike off to right. After about 2 f. ford Shung Luchi stream; then pass the scattered villages of Tatir, Chubeleq and Charak, at the last of which a large stream called Charak Istang has to be forded. The whole of this march, which goes through cultivated country, is quite easy for all pack transport. For wheels it would be most inconvenient at places, though it is said Mohafas (local small two-wheeled carts) occasionally use it. At Qaral Jash lives Tila Khan, the British Assistant Aksakal, who is a Maulai follower of the Aga Khan.
	<i>Camping ground</i> .—For a brigade in the fields.
	<i>Water</i> .—Plenty.
	<i>Fuel</i> .—Plenty.
	<i>Fodder</i> .—In small quantities.
	<i>Supplies</i> .—In small quantities.
2 TALQCHI 29 $\frac{3}{4}$ m.	.. 14 $\frac{1}{4}$ m. For about $\frac{1}{4}$ m. through lanes, then across fields, then over a flat plain (soft going at the beginning, stony later on) until at about 7 $\frac{3}{4}$ m. Kaltalah is reached; here a large stream called Khangdeh is crossed by a strong and wide wooden bridge—just before arriving at this bridge another bridge over a deep water channel is met which cannot support wheeled artillery or even carts with broad axles. For a short distance then track follows right bank of Khangdeh, then across fields and marshy ground



ROUTE NO. I. D.—*contd.*

and passing the scattered village of Toquzmat leads on to Talqchi. Nearing Talqchi the river Zarafshan is four times forded—about  $2\frac{3}{4}$  ft. water in December. Talqchi is home of Saiyid Hasan Shah, a Maulai “Pir”, who is now a refugee in Gilgit Agency.

*Camping ground.*—For a brigade in the fields.

*Water.*—Plenty.

*Fuel.*—

*Fodder.*—

*Supplies.*—

} In small quantities.

## 3 YESCHIQ

.. 10 m. About 5 m. through cultivated grounds; then over a flat plain

39 $\frac{3}{4}$  m

for some 3 m. The last 2 m. again through fields. Three streams (all fordable) and several small water-channels are crossed on this march. The scattered villages of Aqtum and Saitugurman *en route*. Yeschiq is home of Maulai “Pir”, called Maula Bakhsh. This place may be roughly located S. E. of Aqtum (Route I. B., stage 15) and almost due E. of Khan Langar.

*Camping ground.*—For any large force in the plain called Chulaq Mana at a distance of about  $1\frac{1}{2}$  m. but there is no water there: in vicinity of Yeschiq space can be found in the fields for a brigade.

*Water.*—Plenty.

*Fuel.*—

*Fodder.*—

*Supplies.*—

} In limited quantities.

## 4 KHAN LANGAR

..  $10\frac{1}{2}$  m. Flat, waterless plain for practically the whole way, passing 2

50 $\frac{1}{4}$  m.

solitary huts *en route* close to end of stage. At Khan Langar lives Khuda Aman Beg, a Maulai and a local civil official. He is closely related to Karim Beg of Sar-i-Kul whose home is in Tung.

*Camping ground.*—For a force of any size in the plain near by.

*Water.*—Plenty from the Zarafshan and a stream.

*Fuel.*—Limited.

*Fodder.*—Grazing good in vicinity.

*Supplies.*—Limited.



ROUTE NO. I. D.—*contd.*

## 5 CHUNDI

.. 16½ m. Flat plain most of the

way. At about 5 m.

66¾ m.

track gets close to the

edge of the Yasling forest through which meanders the Zarafshan river. The forest according to natives was sold by Yaqub Beg (the Bedaulat) to his subjects in Yarkand and Karghalik districts for forty thousand (40,000) tengas. Village and mazar (shrine) of Yasling about half-way. The forest and the village are both 10'—12' below track. *Before reaching Yasling village track bifurcates, the one going to right leads to Chundi, the other goes, according to local information, to Raskam via the Sandil Pass (Route I. B, see stage 15).* Just near Yasling village the ground is badly cut up for a short distance and this piece would be difficult but not impassable for wheels. Nearing Chundi similar kind of ground, but in more aggravated form, is encountered. It is said both these bad places often turn out into a regular quagmire during summer rains. Chundi is a scattered and fairly large village. Karachung on the opposite (left) bank of Zarafshan is still more extensive.

*Camping ground.*—Plenty in Chundi but only in the fields. A large force can, however, find splendid camping accommodation within convenient reach of the Zarafshan, in the flat plain just short of Chundi.

*Water.*—Unlimited.

*Fuel.*—

*Fodder.*—

*Supplies.*—

} Fair amount.

## 6 DOMESIR

.. 16 m. This stage is impracti-

cable for wheels for most

of the way. At about

82¾ m.

¾ m. (from the end of the scattered village of Chundi of previous stage) the Zarafshan is forded. In December water fully touches the girths of horse standing well over 14'2, and as the current is also strong, necessary temporarily to change baggage ponies for camels; later were dispensed with after the second fording of the river about 1 m. further on. In summer, the river being unfordable, track turns sharply to left towards the hills and ascends steeply, *joining the winter route to Qushrab, which is some 3½ m. from the second ford.* Opposite Qushrab there is said to be a ferry but track winds through lanes at some dis.



ROUTE NO. I. D.—*contd.*

tance from the river so cannot be seen. According to natives this ferry is only used in winter and spring owing to flood conditions prevailing during the other two seasons. After Qushrab track leaves the river bank and turns left towards *Tashneh*, a small village where the surrounding rocks are bored and cut into most fantastic shapes, looking like enormous puzzle pieces; hills on the left called *Tauqeh-Taq Mazar* (shrine of "Camel Rock", evidently from the fact that the rock is not unlike a crouching camel). Later on the small village of *Baldir* is met and *Domesir* is not far beyond it.

*Camping ground.*—For 2 regiments in the fields.

*Water.*—From the *Oghri Baldir* stream which is slightly saline.

*Domesir* is said to be liable to severe drought if summer rains fail.

*Fuel.*—  
*Fodder.*— } In small quantities.  
*Supplies.*— }

7 UCH BALDIR (ALSO .. 10 m. This stage, though  
 —CALLED TUZ ALQU, i.e., not impassable, would  
 92½ m. "SALT FIELDS.") be most difficult for  
 wheels, especially when, owing to flood conditions, higher levels  
 along the foot of the hills were to be used. Immediately after  
 leaving previous stage track enters the *Kizil Kia Darreh* or *Qizil*  
*Qia Tang* ("The Valley or Defile of the Red Path", no doubt so  
 called from the colour of parts of the rocks and the soil which is  
 a feature of the place). The village of *Qizil Qia* is not far off  
 and stretches up to a defile where path turns abruptly to left.

*Camping ground.*—The fields of *Uch Baldir* afford camping  
 ground for a regiment.

*Water.*—From *Oghri Baldir* stream.

*Fuel.*—  
*Fodder.*— } In small quantities.  
*Supplies.*— }

According to local tradition *Uch Baldir* ("The Three  
 Ancients") was first founded by "three Arab greybeards who,  
 tired of a roaming life, settled on this spot and formed the nucleus  
 of the village." A small shrine situated at the beginning of the  
 village is pointed out as the burial-place of these wanderers and is



ROUTE NO. I. D.—*concl'd.*

looked upon with a certain amount of veneration by the present inhabitants who claim to be settlers from Baltistan.

8 EGHIZARAK .. 15½ m. Here joins stage 17 of  
KURGHAN (ALSO Route No. I. C.)  
108½ m. CALLED PICHANLIQ)

## ROUTE NO. I. E.

FROM CHAHIL GUMBAZ TO YARKAND *via* KARA  
DAVAN AND KIZIL (INVERSE).

113 m. 4 f. miles.

6 stages.

*Authority.*—Yarkand Mission (native information), 1873;  
Bower, 1889; Dauvergne, 1889; Young-  
husband, 1889; Pemberton, 1892; Dun-  
more, 1892; Godfrey, 1897; Miles, 1903;  
Kornilov, 1903; Mackinon, 1904.

*Epitome.*—This route is suitable for pack transport, but there is a serious obstacle at stage 2 in the shape of a precipice, down which the Earl of Dunmore's horse had to be lowered with ropes in 1892. The valley of the Kizil river at stage 3 is also very difficult for pack animals. None of the passes are difficult on this route.

*Camping ground.*—Available for at least one battalion at each stage.

*Water.*—Sometimes scarce at stages 2 and 3. Plentiful at remaining stages.

*Fuel.*—Plentiful.

*Fodder.*—Good grazing throughout.

*Supplies.*—Nil, except in small quantities at Tashkurghan. When there is no water at the stages traffic between Yarkand and Tashkurghan follows route XII, Section 1, 3 stages back to Kizil Bazaar and then to Iggiz Yar (Route I. G.); thence by Route I

No. of stage  
and total  
distance

Details.

1	YAKIR-I-KURGHAN. 20 m.	The road passes over a well cultivated and thickly inhabited
20 m.		



ROUTE NO. I. E.—*contd.*

plain cut up by innumerable irrigation canals, bordered by rows of willow and poplar trees. The fort of Yakir-i-Kurghan is rectangular, 100 paces by 100 paces, with small bastions at the corners, walls 9' thick, made of mud and kept in fair order; the ditch is about 30' broad at the top, 12' deep, and 6' broad at the bottom, it is commanded by the parapet. On each side of the entrance which is on the S. side, the walls are immensely thick. On the high ground to the W., about 900 yds. off, are situated two lookout towers. There are no troops but it contains a customs house.

2 KIZIL TAGH .. 23 m. 4 f. Good road over the *Shaitan Kum* or *Devil's Sand*. There is no water in this desert. The most serious obstacle to the passage of troops on this route is a precipice on the W. side of the Kizil Tagh Mountains, down which the horses of the Earl of Dunmore's caravan had to be lowered with ropes, 5 men to each horse.

3 ARPALIK .. 15 m. 4 f. At 7m. the road passes along a very narrow ravine which is very difficult to traverse in the afternoon owing to floods caused by the melting of the snow on the hills above. Along this ravine by the Kizil river, to the 12th m. at Tangitar, the rate of travelling with ponies does not exceed  $\frac{1}{4}$  m. an hour. The road is very difficult. Kugiar, a camping ground *not to be confounded with the town of Kugiar*, is passed at about 30 m. from Yakir-i-Kurghan. Lieut. Bower had to march from thence to Yakir-i-Kurghan owing to there being no water between these two places.

4 KHAZAIKVIL .. 21 m. Over the Kizil Dawan, about 10 m., and the Kara Davan just beyond. The ascent to the Kara Davan from the Tash Kurghan side is by zig-zags over a narrow summit between two deep ravines. The descent from the pass is gentle and the surface soft. The Kizil Dawan, on the contrary, has a gentle ascent and a fairly deep descent towards Yarkand, but on the whole neither pass is a serious obstacle for pack transport.



ROUTE NO. I. E.—*conc'd*

From the village of Yarmunarik the road passes down by a tributary stream of the Chaarlun river.

5 TASHKERIM .. 14 m. 4f. Up the Chaarlun river, passing Voya, 15 houses, Mirgal 25 houses, and a Bagh, 30 houses. From Tash Kerim a foot path leads across the hills to Kinkol Camp.

Fuel.—Available.

Grazing.—Available.

6 CHAHIL GUMBAZ 19 m. Up the river. Pass Alumbit Kurghan. Route No. 1 is entered at this stage.

7, 8, 9, 10 .. 44 m. Vide stages 6, 7, 8 and 9. Route 1, Section 1.

166 m. 4f.

## ROUTE NO. I. F.

FROM TARBASHI [ROUTE I(5), STAGE 1] TO KASHGAR  
via THE KARATASH VALLEY.

132 miles.

8 stages.

Authority.—C. P. Skrine, April 1923.

*Epitome.*—This route can as a rule only be used in the months of October, November, December and April, and not always then. In January, February and March, and sometimes also in December and April, the Buramsal Pass is blocked with snow; while between May 1st and September 30th the volume of water in the Karatash is so great that the passage of the gorges between Chat and Khanterek is impossible, even for the local Kirghiz on foot. Mr. Skrine descended the Karatash Valley in 1923 between April 11th and 13th with loaded ponies, and Sir A. Stein did so with the help of local camels at the end of September 1913.

Water.—Plentiful and good throughout.

Fuel.—In small quantities up to stage 4, thereafter plentiful.



ROUTE NO. I. F.—*contd.*

*Fodder.*—Grazing poor during the month in which route is practicable.

*Supplies.*—Except in Sarikol and between Altunluk and Kashgar, nothing can be had except a few sheep and small supplies of milk and eggs from the Kirghiz.

No. of stage and total distance.	Details.
1 BURAMSAL 17 m.	.. 17 m. For the first 10½ m., the track is the same as that of Route I, Section 1, stage 9. Then, instead of striking up the Tekasikrik <i>nullah</i> it continues up the Buramsal Jilga (valley). This is inhabited by Kirghiz only in the summer months.
2 KIZMAK 31 m.	.. 14 m. The Buramsal Pass is rocky and difficult, and it is advisable to secure the assistance of local yaks, which can be arranged for from Toile-bulung. The descent on the north side is very steep. At m. 8 the mouth of the Merki <i>nullah</i> is passed on the left, after which the track follows the left bank of the river and is for the most part easy and open. There are usually one or two Kirghiz tents either at Kizmak Aghzi or 1 m. up the <i>nullah</i> of that name to the E.
<i>Fuel.</i> —Brushwood. <i>Supplies.</i> —Nil.	
<p><i>NOTE.</i> Route I F (a).—From this point a track crosses the Kizmak Pass (14,000 ft.) at m. 2 and descends by the Chumbuz Jilga to Aktal in the Kinkol Valley, 12 m. (see Route I Sec. 1, stage 11). The Kizmak Pass is very steep on the W. side and the assistance of yaks is necessary on April 10th 1923 it was practically free from snow.</p>	
3 CHIMGAN AYAGHI 46 m.	15 m. The valley below Kizmak gradually broadens out and the track is well marked and easy. The river is crossed 5 times before Chat (m. 8); in the low water season the fords present no difficulty. The Karatash river which comes down with great force from a <i>nullah</i> on the left bank is crossed at m. 5



ROUTE NO. I, F.—*contd.*

(see Route 5). At Chat there are two stone-built farms belonging to Kirghiz. The Ghijak *nullah* is passed at m. 9 on the right bank. At Bek Targhak m. 12 there is a Kirghiz farm. Below this point the valley contracts and the river has to be crossed four more times (7 since Chat) before Chimgan-ayaghi is reached; these fords can only be used in the low water season. At the halting place (alt. 10,100') the Chimgan river comes in on the left bank. Owing to the snows of Kungur and the Shiwakte this river carries twice as much water as the Karatash, and it, rather than the latter, should be regarded as the main stream. The floor of the Chimgan valley is 1 m. wide and nearly flat, with woods of mountain ash and alder. 20 or 30 Kirghiz families live up it and supplies in small quantities may be obtained.

4 KAYING AGHZI .. 14 m. The whole of this  
 60 m. march lies through  
 the Karatash Gorge  
 and is rough and trying for loaded ponies. The combined waters of the Chimgan and Karatash are crossed 8 times; none of the fords presents any great difficulty in the low water season, but the river is unfordable at any point in the summer, even by camels. In April 1923 the river at the fords averaged 50' broad and 1' 5" deep, with a velocity of 5 m. p. h. The sides of the gorge are from 8 to 10 thousand ft. high and precipitous throughout. The best form of transport is undoubtedly the local camel, which owing to its height can take its load without difficulty among rocks which necessitate the frequent unloading and reloading of ponies. The worst section of the gorge is between Bezillik and Karatumush Aghzi, miles 5—11, where the stream is unfordable even in winter, the track keeping to the right bank and consisting at times of a little more than a ledge on the cliff-face. After this it improves, though still very stony, and the river is forded 5 times without much difficulty. At Kaying Aghzi there is a Kirghiz bridge which connects the Kaying, Karatumush, Chopkhana and Yapchan Jilgas on the left bank (40 families) with the Terek Kichik Jilga on the right bank (60 families).

*Supplies.*—In limited quantities can be had from these valleys by arrangement with the Beg. 8 miles up the Kaying Jilga there are considerable woods of deodar and juniper and good pastures used by 8 Kirghiz families.



ROUTE NO. I. F.—*contd.*

5 SAMAN .. .. 15 m. For 4 m. the track  
 75 m. lies through the Tugene Tar gorge and  
 crosses the river 5 times. Then the valley widens out and at  
 m. 5 the river is crossed once more, 1 m. above Khan-terek.

[NOTE. Route I F (b).—From this point a well-marked track leads S. W. up the Chopkana Jilga over the pass of that name at m. 8 (11,500') into the upper Kaying Jilga, which is otherwise inaccessible in the summer months owing to the volume of water in the Tugene Tar. A branch of the same track takes off at m. 6 across the ridges to the W. of the Chopkana Jilga and affords access to the forests and pictures of the Yapchan Jilga, which debouches at Khan-terek by an impassable gorge; thence a very steep track, usable by loaded yaks, leads over a pass (12,000') into the Tigarmansu Jilga, an affluent of the Gez Darya (see Route 5, stage 3). From the head of the Kaying Jilga (m. 16 from Khanterek) a very difficult pass (15,250') which can only be crossed on foot during the months of August—October leads over to the Chimgan Jilga, see st. 3 above.

(Route I. F. route continued).

At Khan-terek (Khurgan) there is a Kirghiz bridge connecting farms on both sides of the river. The path keeps to the left bank and a mile lower down rounds an awkward corner of rock just before reaching the mouth of the Achik Jilga.

NOTE.—A path fit for ponies leads over a pass (9,500')  $2\frac{1}{2}$  m. up this nullah, to Kauruk on the Gez River. This route may be used as an alternative to the Tokez Dawan Route up the Gez valley [Route V(1)] when the Gez. River is in flood. At Achik Aghzi the Karatash takes a sharp bend from N. W. to N. E. and from this point to Saman the going is good and the valley wide. At the camping place there are some large trees and a deserted farm house.

Fuel.—Plentiful.

Supplies.—Nil.

6 ALTUNLUK .. 20 m.  $1\frac{1}{2}$  m. below Saman  
 95 m. the river has to be  
 crossed and recrossed  
 at some rapids where it breaks through a sandstone ridge.  
 From here to Altunluk the going is good, but the river has to be  
 crossed once more at m. 13. In summer this ford is unusable



ROUTE NO. I. F.—*concl'd.*

but the river can then be crossed 3 m. lower down opposite the willow plantation at Moghul Ere. At the latter ford in June 1923 the river ran in 7 channels, the three largest of which averaged 50' wide and  $1\frac{1}{2}$ ' deep, with a velocity of 4 m. p. h. At m. 19 the shrine of Pakhlan Khojam is seen on a hillock on the left bank, just before reaching Altunluk.

*Supplies.*—Plentiful.

*NOTE.*—When the water is high the obstacle formed by the narrows at m.  $1\frac{1}{2}$  can be turned by a detour among the hills to the W. The track strikes up a nullah immediately below Saman and at 4 m. crosses the sandstone ridge above mentioned by a "knife-edge" pass called the Aksai Dawan. For 50 yds. the descent on the N. side is excessively steep, the track being confined to a narrow cleft in the rock pitched at an angle of  $20^\circ$ . Another barren nullah is followed down for 5 m. and the main valley is reached 1 m. below the narrows. The writer's caravan of 11 ponies took 7 hrs. to do this detour on one occasion from the north, and 5 hrs. on another from the S. In the former case the loads and the ponies themselves had to be man-handled over the pass, in the latter it was not found necessary to unload.

7 POKKALIK (SURKHO) 19 m. After 8 m. of more  
open gravel plain  
114 m. the track enters the  
cultivation of the Tash alik river valley. At m. 12 the small bazaar and ruined fortress of Akhtor are reached and the river, which is here wide and shallow, is crossed. The last 4 miles are across a grass plain. At m. 18 another river is crossed by a wooden bridge which can be used by local loaded carts. The road is fit for wheeled traffic throughout.

*Water.*—Good.

*Supplies.*—Plentiful.

8 KASHGAR .. 18 m The road, which is  
(OLD CITY) fit for wheeled traffic,  
132 m. traverses cultivated  
lands and crosses several streams by strong wooden bridges. The walls of Kashgar New City are passed at m. 12. One m. to the N. E., the main Kashgar-Yarkand road is joined at m. 13.



## ROUTE NO. I. G.

FROM IGGIZ YAR TO KIZIL BAZAR (INVERSE).

20 miles.

1 stage.

Path strikes W. from main road  $\frac{1}{2}$  m. W. of bazaar thence along the dry bed of the Shanyaz Ustang. Pebbles and gravel, a track could be made for wheels. For further details, *c.gs.* water, etc., see Route I. sec. 7, st. 12 and Route XII, Sec. 1, st. 3.

## ROUTE NO. I. G. (i).

FROM YANGI HISSAR TO YARKAND *via* THE KIZIL TAGH. (INVERSE.)

NOTE TO BE KEPT INVERSE.

108 miles.

5 stages.

*Authority.*—C. P. Skrine, 1923.

*Epitome.*—A convenient route by which to reconnoitre the Kizil Tagh Mountains to the E. of Yarkand. No difficulties for loaded animals, but not possible for wheeled transport.

*Camping ground.*—Room for a few tents at all stages.

*Water.*—From perennial streams at all stages.

*Fuel.*—Brushwood at all stages, pinewood obtainable at Kizil Tagh.

*Supplies.*—Very small quantities obtainable except at stages 1 and 4.

No. of stage  
and total  
distance.

Details.

1 KOK ROBAT

.. 22 m. See Route XII, Sec 1, stage 4.

22 m.

2 CHIGHMEN AYAGHI

27 m. Track crosses desert bearing due W. towards the hills, and

49 m.

reaches at m. 10 a spring of brackish but just drinkable water among extensive reed-beds called Achik Yusuf Qadir Khan. Thence it strikes W. N. W. up a gentle slope for  $7\frac{1}{2}$  m. to the foot of a low range of hills. Two curiously shaped hills resembling a tooth and a table respectively are seen 1 m. to the N. At m. 18 $\frac{1}{2}$  the track passes through a perpendicular-sided gap in the hills and descends into a dry winding water-course.

M226CGS

2H



ROUTE NO. I. G. (i)—*concl'd.*

This is followed up (general direction west by south) to a pass, steep on the east side, which is crossed at m. 24½. The Chigmen Jilga which is now entered is a long valley of the Kizil Tagh inhabited by settled Kirghiz living in stone huts.

*Water.*—From perennial stream.

*Grazing.*—Fair.

*Supplies.*—Small quantities of wheat and barley obtainable.

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### 3 SERAI JILGA

.. 23 m. The Chigmen Jilga is followed up for 9½ m. to a point where

72 m. there is a very sharp tooth-shaped peak. Here the main valley (*which goes up to the Khankul Pass leading over to Arpalik on the Yarkand-Chahil Gumbaz road, 1 march*) is left and a narrow and rocky gorge is followed up in a northerly direction. The gorge opens out slightly at the Kirghiz farmstead of Suget Ayaghi, but at m. 12 it contracts again to 15 yds. with perpendicular walls 500 ft. high. The wide valley of Suget with good pastures and 3 or 4 farms is now traversed and left by a pass 10,530 ft. high at m. 16, on the flank of the pine-clad Dardul mountain. The track now descends, at first very steeply, into the Tam Valley, the Kirghiz settlement of which (30 families) is reached at m. 18, altitude 9,200'. A branch of the Tam Jilga leading northwards is now ascended until a pass (10,250') is crossed at m. 22. This pass, like the preceding one, is steep but not difficult. Two or three very poor Kirghiz families live in the Serai Jilga.

*Water.*—From perennial stream.

*Grazing.*—Good.

*Supplies.*—Nil.

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### 4 IGGIZ YAR

.. 17 m Leaving Serai Jilga by a steep path, up the north side

89 m. a pass (11,500') is crossed at m. 2 and the track descends the Karaul glen. The small Kirghiz settlement of Ran Kull is passed at m. 3. 3 m. further down the Karaul glen debouches into the Kinkol valley at Kichik Karaul, where routes I (Sec. 1) and 5 are joined

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### 5 YANGI HISSAR

.. 19 m. See Route I, Section 1, stage 13.

108 m.



### ROUTE NO. I. H.

FROM KIZIL DAWAN TO KIZIL BAZAAR.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*miles?*

*3 stages?*

*Epitome.*—According to the above map the route leaves Route I. E., 2 miles N. of Kizil Dawan, and goes N. *via* Arpalik, Khan-Kul-Dawan, Khan-Kul, 11,350'.

(Stage 1) ? Sulak Kul Dawan (there is a copper mine near here), Ishkaga, Kizil-Yar, Kapki-jilga, Akchigh, Dastas-Ata, along Chighmur-Jilga, Chigmen, another Chigmen, Hasa, Chamuluh, on main Kashgar-Yarkand road, 5 miles N. W. of Kizil Bazar.

No further details.

### ROUTE NO. I. J.

FROM KASHGAR TO LAILIK (MERKET) *via* YUGOPA.

*104 miles.*

*5 stages.*

*Authority.*—Captain Shuttleworth, 1909; Lt.-Colonel P. T. Etherton, 1920; C. P. Skrine, 1923.

*Epitome.*—A good but unmade road fit for all forms of transport, running through fertile country. There are no important obstacles on this road.

*Camping ground.*—Ample at each stage.

*Water.*—

*Fuel.*—

*Fodder.*—

*Supplies.*—

} Plentiful.

No. of stage  
and total  
distance.

Details.

1	YAILAK ..	.. 17 m.	On leaving Kashgar Old City road runs through cultivated country frequently leading along avenues of trees. At 13 m. Fyza-bad R. is reached and followed for 4 hrs. Several small hamlets are passed, and at 17 m. Yailak is reached. (Beg's house with 2 habitable rooms and small bazar.)
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ROUTE NO. I. J.—*contd.*

2 YUPOGA .. .. 33 m. Road lies through well cultivated country passing Dangalchi (or Yangi Arik) at 8 m. Doshamba Bazar (Khan Arik) m. 13 and Yak Shamba (or Dong Arik) at 22 m. Latter is a large and scattered village. Thence to Yupoga well-shaded road.

Water.—Slightly salty.

3 TARIM .. 20 m. Good road through open country and occasional patches of cotton cultivation and small copses of poplar and willow. At m. 3 two or three small lakes on right. At 10 m. Yildizbik village. At 12 m. pass Habib Bibi Mazar where there are 14 farm houses and a large shrine. Thence road to Tarim is good but sandy in places. Cross the Moghal Darya at 14 m., which forms no obstacle; reach Tarim at 20 m. Population 4,600. Bazar every Friday. Water drinkable but slightly brackish.

4 LANGAR .. 26 m. Beyond Tarim cultivation is left and road becomes very heavy and sandy, frequently passes over sand-dunes where wheeled transport would experience difficulty. This is known as the Shamal Kan which extends for 4 m. E. of Tarim to Langar and was once a vast forest of tugrak trees, the stumps still showing everywhere above the sand. At 16 m. reach a waterhole said to be an arm of the Yaman Yar river which flows underground and joins the Yarkand river to the E. Water therein is stale and brackish and in the summer of 1920 even horses refused to touch it. In April 1923 water was found at depth of 2 feet. If it is intended to camp at this waterhole known as Oi-Kudaq, water and fodder should be brought from Tarim. Desert here is well covered with brushwood and desert poplar, and is dotted with tamarisk cones.

On leaving Oi-Kudaq road continues sandy and goes over dunes until Langar is reached at 25 m. a collection of 5 houses in a tamarisk jungle.

5 MERKET .. 8 m. Road, although sandy, is not heavy going. At 3 m. reach Lailik a village of 70 houses, whence road to the Yarkand river lies



ROUTE NO. I. J.—*concl'd.*

through tamarisk jungle and over firm ground. At 5 m. reach the bank of the river and cross to eastern shore by flat-bottomed boats capable of carrying about 40 men standing. From river bank road runs through jungle of tamarisk, poplar and willow and at 8 m. reaches Merket, a village of 300 houses, the capital of the Bolan country. There is a Bazar at Market every Monday, and the district is in charge of a Chinese official under the orders of the Amban of Maralbashi (acting).

## ROUTE NO. I. K.

FROM FAIZABAD TO KHAN ARIK (DOSHAMBA),  
[ROUTE I (J), STAGE 2.]

24 miles 4 f.

1 stage.

*Authority.*—Captain Shuttleworth, 1909; Lt.-Colonel P. T. Etherton, 1920.

*Epitome.*—A good but unmade road fit for all forms of transport through fertile country.

No. of stage and total distance.	Details.
1 KHAN ARIK	.. 24 m. 4 f. On leaving Faizabad the country is open and extensively cultivated. At 7 m. Kizil Bai is reached, a small village, bazar on Tuesdays. Supplies limited, sheep and cattle abundant, water good. The road is crossed in many places by water channels which are not serious obstacles. The road runs S.-W. through a very fertile plain dotted with farm houses.
NOTE.—From Khan Arik a road runs S.-W. to Yangi Hissar [Route I.K. (i)] not suitable for wheels; another road due west to Yapchan [Route I. K. (a)] fit for wheels, and a third N. W. to Kashgar (Route I. J.) fit for wheels.	
Six m. east of Khan Arik is Ekshamba, a small village with bazar every Sunday. Khan Arik or Doshamba is a large village with a bazar every Monday. It stands in a richly cul-	



ROUTE NO. I. K.—*concl'd.*

tivated, alluvial plain which is watered by many small arms of the Yaman Yar river and numerous canals. The road runs S. E. through richly cultivated country, wheat and cotton chiefly. Route 27 from Kashgar joins this route near Khan Arik.

*Supplies.*—Of all kinds, plentiful.

*Water.*—Good.

## ROUTE NO. I. L.

FROM TUG (TEJAN ?) TO TEREK PASS, *via* SARIGH TASH.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

61 miles approximately.

4 stages.

No. of stag and total distance.	Details.
1	TANGTAR KARAUL    Route apparently goes N. along N. branch of Terek Su, past Oi-
..	Kacha, Ara-Mahalla, cultivation, Kok-tar, Gai-Aghzi, to Tangtar Karaul.
2	TARGHALIK    ..    Giz Langar, Sarigh Tash, W. to Targhalik.
3	Thence 2 stages to Terek Pass.
..	
4	



## ROUTE NO. I. M.

FROM SARIGH TASH TO CHONG KARA JOL. (Route I, Section 2, stage 4.)

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

45 miles.

2 stages.

No. of stage and total distance.	Details.
1	BASH-SURGHUN .. Route apparently goes E. through bare hills from Sarigh Tash ( <i>whence a track leads N. 9 m. to Yairam Bulak</i> ) pass Osmari Tagh Tigharmate (5,500 ft.), Ak-tash, Bash-Sarghun.
2	CHONG-KARA JOL Ko-Doba, sandy with scrub jungle. Ak-Jong, Kichit, Kasajoi, Chong-Kara Jol.

## ROUTE NO. I. N.

FROM UTCH TURFAN TO KIZIL BULAK.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

105 miles?

6 stages?

No. of stage and total distance.	Details.
1	KACHCHE .. Route apparently goes N. E. past Market, cross lesser Channel of Tushkan Darya, past Majan, cross Tushkan-darya, past Sultan-Ming-bash-aba-Mazar at Kungirat, cross Ash-yar-jilga.



ROUTE NO. I. N.—*concl'd.*

- 2 TAGHAK .. Leave cultivated country, N.  
E. to Kum-arik-darya  
S. E., 4 miles along  
river, cross to Sheikle, cultivation to Taghak.
- 3 FAKHALIK .. N. E. cross 2 branches of  
(7,050'). Dabzi-yar, Tokhta-  
oila-ozar, Kara Kichik,  
Zarkhon Oghil, Koshta-yoi-dawan, Octang-yar, Kokala Dawan,  
(9,650'), At-oinek-dawan (9,150') to Fakhalik.
- 4 TARLAK .. *Via* Tok-desun-dawan, to  
(6,180'). Tarlak.
- 5 KARA BULAK .. South, Goj-jilga-dawan, Tar-  
tak Sai, S. E., Terang-  
dawan, North, Jigda-  
bulak-dawan, Jigda bulak, N. E., Islak-oghil, Bogha-iakhe-dawan,  
Kara bulak.
- 6 KIZIL BULAK .. Ak Masdan, Korse-bai-  
(5,740'). daryasi, Kurghoiluk-  
jilga, Mazar-aldi, Boz-  
dong, Kizil Bulak (5,740').

## ROUTE NO. XII A.

FROM KHOTAN TO AKSU.

*miles.**16 stages.*

*Authority.*—Map of Sir Aurel Stein's Explorations in  
Chinese Turkistan and Kansu.

*Epitome.*—There are 2 routes from Khotan northwards, one  
XII B, *via* Kara-Kash and the right bank of Kara Kash River  
(no details) and the other route XII-A, this direct route, up  
right bank of Urung-Kash river, as far as the end of the 5th  
stage where the 2 rivers meet at the Koshlash-Langar.

No. of stage and total distance.	Details.
1 YANGI-ARIK	.. The direct route appears to be <i>via</i> Urung-Kash river, odd passes, Yangi Arik.



ROUTE NO. XII A—*contd.*

- 2 ISLAMABAD.  


---

 ..  
 3 MIRAWIT.  


---

 ..  
 4 KIRIGUT-OGHIL.  


---

 ..  
 5 KOSHLASH-LANGAR.  


---

 ..  
 6 CAMP .. Henceforth route follows  
 Khotan river crossing  
 from side to side at  
 .. intervals.  
 7 MAZAR-TOGH .. Pass a ruined fort.  


---

 ..  
 8 TONGUZLUK.  


---

 ..  
 9 AYAK-USTANG-AGHZI  


---

 ..  
 10 MANDARLIK OGHIL *Viâ* Hedin's Pool and Gung  
 Masjidi to Mandarlik  
 .. Oghil.  
 11 CAMP .. *Viâ* Chong Tunshuk, Bora  
 Sushkan to Camp.  


---

 ..  
 12 JIDJILIK-ARAL.  


---

 ..  
 13 CAMP .. Up E. bank of Khotan river  
 to Danish Aral *viâ*  
 Kum Chamak, Kodak  
 ..  
 Aral, Omulak Aral to Camp.  
 M226CGS



ROUTE NO. XII A—*contd.*

14 KORUKIK IKIM .. Leave river moving N. W.  
by N. *viâ* Shote and  
the dry Ghaz Kum,  
through dunes and dead jungle to Korukik-Ikim.

15 MATAN .. Cross Tarim river just E. of  
Aksh and Yarkand  
river junction. Ferry-  
man's hut, N. W. along E. of Aksu river *viâ* Tushek Kol, scrub  
covered marshy ground over canal to Matan.

16 AKSU .. Muzaman Mazar, two more  
canals to Wakhpe,  
Yangi Shahr and Kona  
Shahr (Aksu).

## ROUTE NO. XII B.

*Vide* Epitome of Route XII A (No details).

## ROUTE NO. XII C.

FROM MIRAWIT TO KOCHGAR OGHIL.

80 miles.

? stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in  
Chinese Turkistan and Kansu.

*Epitome.*—From Kosh Sutna on E. bank of Yurung Kash  
river, S. of Mirawit, track leads E. across desert to Kochgar  
Oghil. There is water to be obtained apparently at 6' to 10'  
below the ground surface all along the route.

No. of stage and total distance.	Details.
No details.	



## ROUTE NO. XII D.

FROM KERYIA TO KUCHAR.

miles ?

24 stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—A difficult journey owing to lack of water.

No. of stage and total distance.	Details.
1	SAGHIZILIK YAILAK. From Keriya northwards along Keriya river, pass Kachun, Bostan Karakhan to camp opposite Saghizilik Yailak near river.
2	YOGHAN TOGHRAK .. Pass Shakan, Kara-Burur, YAILAK. Dube-Oghil, Tabab Khana—to camp op- posite Yoghan-Toghrak-Yailak near river.
3	BURHANUDDIN MAZAR Past Bulak, Cholak-Mazar- (4,000'). sasik-Kol, Keng Koik, [from here one can cross the desert to Besh-Toghrak-Langir (Route XII) via Ulugh Mozir.] Pakhta-Bash-Oghil, Chitala, Padshahim-Mazar, Gabra- kot, At-Yailak, Lempa-Yailak to Burhanuddin-Mazar.
4	KOCHGAR OGHIL .. Kokjigda, Dong-Satna, Patal- (4,090'). Oghil, Dong-Nacha, Chigit-Kurghan, Yay- in-Oghil, Segiz-Oghil, Takagh-Oghil, Tire-Kurghan, to Kochgar- Oghil on river.
5	CAMP .. Still north along river, Basuk- Oghil, Chal-Oghil, Ochke-Ulus-Oghil, new jungle to camp.
6	CAMP .. Yundama-Kol, Misali-Oghil, Kighilik, Mullah- Gada, Chitan-Oghil, thick jungle, Kumarabat, thin toghrak jungle, Bilangan, camp near river.



ROUTE NO. XII D—*contd.*

- 7 YOGHAN KUM .. Thin forest, Yazkorghar-Yailak, Togetaidi, thick jungle, Sarik-Boye, Tuge-Chushkek, Sukma-Oghil, to Yoghan-Kum.
- 8 CAMP .. From here the route becomes a desert track. Here are some islands ; route crosses and recrosses river to camp.
- 9 CAMP .. Passes lagoon with living scrub and reeds, dunes 40' to 50' high to camp.
- 10 CAMP (3,380'). .. Here track continues N. along dry river bed. River itself runs N. E. from the road for another 5 miles where it becomes lost in the sand.
- 11 CAMP (3,350') .. Dead forest with few living trees, first dead reeds, living toghraks and tamarisks prevalent, past sand ridges through delta of dry Keriya river to camp.
- 12 CAMP (3,330'). .. There are some wild camels in these parts. Camp along dry river bed.
- 13 CAMP (3,180'). .. Along dry river bed, 100' ridges. Camp in dead forest.
- 14 CAMP (3,080'). .. 300' ridge to E. Camp in dunes 40' to 50' high.
- 15 CAMP (3,000'). .. Sand dunes 20' to 30'.
- 16 CAMP (2,930'). .. Low dunes, Dawan 40', dunes 8' to 10' high with toghraks.



ROUTE NO. XII D—*contd.*

- 17 CAMP .. Dunes, belt of toghraks,  
Camp.
- 18 CAMP .. Patches of bare clay, dunes  
15' to 25', rare living  
.. tamarisks, Dawan of  
dunes 50' to 60' high.
- 19 CAMP .. Tamarisks and shrubs, dunes.  
— (3,040').
- 20 LUK CHIKTE .. Living tamarisks and reeds,  
dunes, thick toghrak  
jungle to Luk Chikte  
..  
pools and wells.
- 21 CAMP .. At Bashiakin, low tamarisks  
and scrub, thin  
.. toghrak jungle, Karuk.  
Chol, Arpalik, abandoned fields, luxuriant toghrak jungle,  
shepherd's hut, camp on Samsak-darya.
- 22 CAMP .. S. E. to Kizil Jong, then N.  
E. to Paita Tushte  
.. cross Samsak-darya  
Kol-kol, camp near Peres, on Ugen Darya. *A track runs E. and  
W. along S. of this river (vide Route XIV O.)*
- 23 SHAHYAR .. Cross Darya pass, Langar-  
Shahid-Ali-Mazar, aban-  
.. doned fields, Chimen,  
cultivation, Kazak, Terek, much cultivation.
- 24 CAMP .. From Shahyar to Kuchar is  
a main road. Cross  
.. Shahyar river, Nangi  
Abad, Pas, Muzart river, Baba-Kamba-Mazar, Char-Shamba-  
bazar, to camp near by.
- 25 KUCHAR .. Dot, Pailu, Kokucha, Korika,  
Elesup, Sher-Kol-  
.. Chini-bagh, Tughemen-  
bagh, Kuchar.



## ROUTE NO. XIV C.

FROM LAMLUNG MAZAR TO KARA-TASH-MAZAR.

40 miles.

4 stages?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

No. of stage and total distance.	Details.	
1	CAMP	.. East over Kuyil Dawan, 13,500' to camp.
..		
2	KARA KISHMAK	.. Thence over Topa Dawan and cross Route XIV; thence E. along Chochu
..		
	Jilga to Kara Kishmak.	
3	CAMP	.. Over Pushki river, Chaba- Mazar, Raskam, Chikobashi, to camp
..		
	on Achchik Jilga, 10,420 ft.	
4	KARA-TASH-MAZAR	Along Jilga, Burhan-Mazar, Kara-Tash-Mazar.
..		

## ROUTE NO. XIV D.

FROM SANJU TO KOK YAR, *viâ* KILIAN BRIDGE.

? miles.

6 stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—

No. of stage and total distance.	Details.	
1	KARA SU	.. West over Sanju river, Kizil, Bash-langar, Ak-Ila Tarak Oghil, springs, Tuzgen Oghil.
..		



ROUTE NO. XIV D—*contd.*

2	BOKUM	.. Direction N. W.; some cultivation.
..		
3	KILIAN BAZAR	.. Cross Kilian river and follow it : Yut Kuluk, Sarigh Uruk, Kangar, Kilian Bazar.
..		
4	HASSAN BOGHRA MAZAR.	.. As for Route 14 to Boinak-Langar, through cultivation, whence leaves road to Guma bazar (Route XIV F) and goes N. W. Bash-Langar, Toghrak-Kupruk-Langar, Hassan-Boghra-Mazar.
5	YAWASH ..	.. Leaves road to Oi-Toghrak and Bori (Route 14), goes W. by N. through low dunes with tamarisks, Achchik river bed, pebble sai, to Yawash.
6	KOKYAR ..	.. Plenty of cultivation, Pass Yul-arik bazar, over Ak-Chigh Jilga, Saskan Mazar. Kokyar.

## ROUTE NO. XIV E.

FROM TUZGEN OHGIL TO SULAGHIZ LANGAR.

10 miles.

1 stage.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1	SULAGHIZ LANGAR .. Pass Yar Oghil, cultivation, Bash Sulaghiz, Sulaghiz Langar (Route XIV).
..	



## ROUTE NO. XIV F.

FROM BOINAK LANGAR TO GUMA BAZAR *viâ*  
KOSHTAGH.

34 miles.

2 stages?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1 KOSHTAGH ..	.. N. E. Achma, Oibagh, Dojin, Bomoga. Cultiva- tion along road.
2 GUMA BAZAR..	.. N. E. of Tizan Taz- ghun, thence along E. bank of Kilian river, Kirban-beg-akin, Ak-Moman-Langar, cross river N. E. of Yapchanlik, Kargha-Toghrak, Sagan, thence through cultiva- tion to Ortang, and Guma Bazar.

## ROUTE NO. XIV G.

FROM SANJU BAZAR TO MOJI (ROUTE XII) *viâ*  
MOSHE.

25 miles?

1 stage?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—Cultivation all the way.

No. of stage and total distance.	Details.
1 MOJI ..	.. 25 m. N.E. keeping near Sanju river. <i>Viâ</i> Dombak, Baskak (S. of Moshe), then N. by W. <i>viâ</i> Baghta, Bai-bagh, Kona-Bai-bagh, Moji.



**ROUTE NO. XIV H.**  
**FROM MOSHE TO ZANGUYA.**

14 miles?

stage?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—Just before reaching Moshe from Sanju Bazar, a road leads to the E. of Moshe, along Yil-Bashi-Akim to Zanguya.

No. of stage and total distance.	Details.
No details.	

**ROUTE NO. XIV J.**

**FROM SANJU BAZAR TO PIALMA *viâ* LAMUS.**

42 miles.

3 stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1	PUSHKI LANGAR .. 10 m. Leaving Moshe road at Dombak (1½ m.) go E. by Katak-tash,
2	LAMUS .. .. 12 m. Kumshuluk Jilga Kochalik-Sai, grave plateau, Kochalik Jilga, sandy ridge, Kok-boinak jilga, Kochkar-bashi, S. E. Kum-Koilagan Jilga, Dore on Duva river; cultivation from here to Lamus. Road along W. bank of river. Cross river to E. bank of Duva bazar and back to W. bank at Yukake-mahalla.
3	PIALMA .. .. 20 m. N. E. gravel sai, then loess steppe.

42 m.  
M226CGS

2K



## ROUTE NO. XIV K.

FROM LAMUS TO ZANGUYA.

22 miles.

1 stage?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1 ZANGUYA	.. 22 m. N. W., flat topped ridge, Kum Koilajan
22 m.	Jilga, Kochalik Jilga,
Kumushlik Jilga, Pushki river.	

## ROUTE NO. XIV L.

FROM MERKET TO URDIKLIK.

61 miles.

3 stages.

*Authority.*—Lieut.-Colonel P. T. Etherton, 1920.

*Epitome.*—Fair road throughout, but impassable for wheeled transport between Ak Dong and Urdiklik owing to high sand dunes.

<i>Camping ground.</i> — <i>Water.</i> — <i>Fuel, Fodder.</i> — <i>Supplies.</i> —	} Ample.
---	----------

No. of stage and total distance.	Details.
1 AK DONG ..	.. 22m. Road good through-
22 m.	out with occasional patches of sand and
salty ground. At 17 m. reach Yarkand river, the banks of which are covered with tamarisk jungle. Cross river at Menut hamlet [See Route XIV (4)] where there are 15 houses and a	



ROUTE NO. XIV L—*contd.*

*serai*. Fording is accomplished by ferry boat built to hold 40 men standing.

Road continues through tamarisk jungle and cultivation to Ak Dong at 22 m.

2	CAMP	..	..	30 m.	Road runs across open cultivated country for 15 m. to Hafiz Mirab, a settlement of 8 houses in maize and other cultivation.
---	------	----	----	-------	---

On leaving Hafiz Mirab road continues through cultivation for 2 m. and then enters on a sandy stretch and heavy going. At 24 m. enter high sand hills and dunes, extremely heavy going for laden horses. At 28 m. leave sandhills and cross stretch of salt-encrusted ground covered with patches of tamarisk reeds to Kizil Su at 30 m. Country here is a vast reed-covered and swampy jungle and noted as a breeding ground for duck.

3	URDIKLIK	..	9 m.	Road runs across level country covered with tamarisk and reeds and occasional patches of cultivation. Reach Urdiklik at 9 m. village of 85 houses and 3 <i>serais</i> .
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## ROUTE NO. XIV M.

*Nil.*

## ROUTE NO. XIV N.

FROM YAKKA ARIK TO KURGHAN.

*Authority.*—N. Fitzmaurice, 1921.

*Epitome.*—Travellers from Kuchar and Bai to Kuldja *via* the Muzart Pass need not follow Routes XIV and I between Yakka Arik and Kurghan. Instead of going by the Kuchar-Aksu main road as far as Cham, they may leave the main road at Yakka Arik, 32 m. W. of Bai, whence there is a small road direct to Kurghan (Kunya Shah), *vide* stage 5 of Route I, Section 3, on the route from Aksu to Kuldja.



ROUTE NO. XIV N--*contd.*

The road to Kuldja leaves the Kuchar-Aksu main road in Yakka Arik village and strikes northwards through land which either is now cultivated or has gone out of cultivation. At first it is a cart road, but it soon becomes a mere pony track. The country is covered with coarse grass and there is a gradual incline upwards. Some small streams have to be forded. Farms and trees are dotted about and the going is good. At m. 13 the small village of Gumbaz is passed. Ostongboi is the name given to the scattered farms beyond Gumbaz there are many horses and cattle here but the crops are poor. Plenty of grazing, but of poor quality; the centre of Ostongboi is reached about m. 21. At m. 24 the road reaches the moraines of the Muz glacier, and it is very rough and stony for the rest of the way to Kurghan.

## ROUTE NO. XIV O.

FROM MARAL BASHI TO KHURLA, *viâ* TARIM RIVER VALLEY.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—A track apparently crosses Tarim river, S. E. of Maral Bashi and follows the south of the river channel past Peres to Kushtam, whence it goes N. E. to Kara Kumon Route XIV. P.

*NOTE.*—From Kara Yulgun a parallel track XIV O (i) (no details) leads to Khurla past Shahyar and thence along the Inchike darya.

## ROUTE NO. XIV P.

FROM KURLA BAZAR TO CHARKHLIK.

? miles.

11 stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—There appears to be a road from Kurla along Tarim river, S. E. to Charkhlik, about 270 miles long.



ROUTE NO. XIV P—*contd.*

No. of stage and total distance.	Details.		
1	KARA KUM	..	..
2	CHONG KOL	..	..
3	CHARA	..	Along Yarkand Darya, and by Chapman-Aghzi- Kol.
4	KUZLEK-MAHALLA .. (2,830').	..	Kalmak-Chushte, Ulugh- Kol. Kechkan- Tarim, Karaghaste. Kuzlek-Mahalla.
5	TIKENLIK	..	Chigelek-ortang, Tamoi Shorluk, Tikenlek.
6	YANGI-GU	..	Cultivation. Dorral cultivation, Mujuk- toghrak, Yangi-gu.
7	TOKUM	..	Track lies between Tarim river and Konche Darya, past
Karatai to Tokum. ( <i>From here a track [Route XIV P (1)] goes N. E. to temple ruins on the ancient site of Lou-Lan whence tracks go N. to Lokchun, and S. E. to Besh Toghrak.</i> )			
8	KURGHAN	..	..
(2,640').			
9	CHIGELIK	..	..
10	CAMP ..	..	S. W. pass Lop (ham- let), over steppe.
11	CHARKHLIK	..	South to Charkhlik.



**ROUTE XIV P (1).**FROM TOKUM TO ABDAL *viâ* LOULAN.

See note to Route XII, Sec. 4, Stage 29.

**ROUTE NO. XIV Q.**

FROM TIKENLIK TO SINGEN.

? miles.

16 stages ?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.*Epitome.*—From Tikenlik, road apparently goes N. E. to Singen about 85 m. *viâ* Ying P'an, Toghrak-Bulak, Azghan-Bulak, where it joins Route XIV R.**ROUTE NO. XIV R.**FROM KHURLA TO LUKCHUN *viâ* SINGEN.

? miles.

? stages.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

No. of stage and total distance.	Details.	
1 KALMAK-OLGAN- BULAK.	.. Route apparently goes E. by S. to Kalmak- Olgan-Bulak.	
2 CAMP.. (3,424').	.. .. Karatagh, Kurak-Bulak.	
3 CAMP (3,635').	.. ..	
4 YAKIM-BULAK (3,680').	..	
5 CAMP .. (3,980').	.. .. Pass Ta-hsi-to.	



ROUTE NO. XIV R—*contd.*

<u>6</u>	CAMP .. ..	Elighan Dawan, Yeman torgai.
	(5,943').	
..		
<u>7</u>	SUGET-BULAK .. ..	Elisen-Bulak, 5,540'.
	(5,326').	
..		
<u>8</u>	CAMP .. ..	
..		
<u>9</u>	CAMP .. ..	Elisen-Dawan, 6,690', S. E. to Camp.
	(5,830').	
..		
<u>10</u>	CAMP .. ..	S. E. to Yakim-Bulak and Shindi.
	(5,890').	
..		
<u>11</u>	SHINDI .. ..	
..		
<u>12</u>	CAMP .. ..	N. E.
..		
<u>13</u>	AZGHAN-BULAK .. ..	Pass gravel glaxis with scanty scrub to Azghan-Bulak, where
..		
Route XIV Q joins.		
<u>14</u>	SINGEN .. ..	Over Tugap-Khan- Akin and Chong- Akin to Singen.
..		
NOTE.— <i>Another Route XIV R (1) goes N. from here to Yarkhoto.</i>		
<u>15</u>	CAMP .. ..	N. through brushwood Yagach-ile dawan, 4,680' to camp.
	(3,820').	
..		
<u>16</u>	ARPISHME-BULAK .. ..	Over pebble sai to Orkash-bulak and Arpishme-bulak. From
	(2,090').	
..		
here the road goes N. E. to Lukehun.		



### ROUTE NO. XIV S.

FROM ARPISHME-BULAK TO TURFAN.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—From Arpishme Bulak (Route XIV R) another route apparently goes N. direct to Turfan Yangi Shahr, 71 miles.

(No details.)

### ROUTE NO. XIV T.

FROM HAMI TO BARKUL.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1 TOKRUK .. ..	N. E. by Akchik Karaul to Tokruk, whence a track leads S. E. to Aralam. N. to Kashuti Karaul (whence a road leads E. to Khotin-tam via Narin and Edira). N. to Barkul-dawan, 9,200' whence a track apparently leads to Route XV, Section 2 in the neighbourhood of Shor Bulak.

### ROUTE NO. 15 A.

FROM KANGSHEWAR TO KHOTAN.

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

45 miles?

stages?

*Epitome.*—A very rough track.

No. of stage and total distance.	Details.
1 SOMGUT	



ROUTE NO. 15 A.—*contd.*

- 2    PUSHA YAILAK .. Pass Hindu Tash Dawan  
17,750'.
- 
- 3    AK-TASH-AGHZI .. Pass Pusha on Pushajilga.
- 
- 4    CAMP
- 
- 5    TASHTÉ OGHIL
- 
- 6    MOZLUGAZ .. Pass Kurat Dawan, 12,090 ft.,  
Kobuga Dawan, 11,580'.
- 
- 7    CAMP .. Pass Elenghat Dawan, 11,960'.  
(7,560')
- 
- 8    LOK-OGHIL .. Thence along Ashpak river,  
to Karakash river and  
Tuman-Aghzi, where  
turn E.
- 
- 9    LANGHRU .. Pass over Ulugh-art-Dawan,  
to Langhru.
- 
- (NOTE.—Whence a route goes W. to Pujiya and Dore).
- 10   KHOTAN .. Go along Karakash river, *vid*  
Ujat to Khotan.
- 
- ..

## ROUTE NO. 15 B.

FROM TUMAN AGHZI TO DORE.

40 miles ?

2 stages ?

*Authority.*—Map of Sir Aurel Stein's Explorations in  
Chinese Turkestan and Kansu.

*Epitome.*—No details.



ROUTE NO. 15 B—*contd.*

No. of stage and total distance.	Details.
1	TONG-BASH-OGHIL Route apparently goes W. Crosses Karakash river, along Toman jilga over Hindi-jilga, Yemaz jilga, to Tong-bash-oghil.
2	LORE .. Over Chaba jilga, Kok Yut jilga, Yar-Yut-Dawan, N. W. Yar Yut, Kara- tash-Mazar, Ghokulung-aghzi, N., Zak-tokai, Kotalik, Tashkan, Kutak-Mazar and join Route 15-C., near Uzun Sai.

## ROUTE NO. 15 C.

FROM PUJIYA TO DORE.

(No details.)

## ROUTE NO. 15 D.

FROM PUJIYA TO KARAKASH.

30 miles ?

1 stage.

*Authority.*—Map of Sir Aurel Stein's Explorations in  
Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1	KARAKASH .. Cross Karakash river. Direction N. E., Kizil Dawan, reach cultivation N. of Sai Bagh, cross tributary of Karakash river at Yokake Mazar, N. by Ak-saya, cross Route XII, 15 m. west of Khotan. Keep N. by Tokhala to Karakash.



## ROUTE NO. 15 E.

FROM ABDUL GHAFUR LANGAR TO TUMAN AGHZI.

? miles.

10 stages?

*Authority.*—Map of Sir Aurel Stein's explorations in Chinese Turkistan and Kansu.

*Epitome.*—Very difficult.

No. of stage and total distance.	Details.
1	}
..	}
2	Route apparently goes N. over snowy col., 19,903' to Karanghu Tagh.
..	
3 KARANGHU TAGH	}
..	
4 NISSA	.. Thence N. W. to Nissa.
..	
5 CAMP	.. Pass Pan-Oghil to camping ground.
..	
6 CHASH (9,700').	.. Then over Brinjak-Dawan, N. to Chash.
..	
7 YAGAN DAWAN (10,390').	
..	
8 YAGHAN AGHZI	..
..	
9 CAMP (6,890').	.. Along Ulugh-art-jilga.
..	
10 TUMAN AGHZI	.. Via Lok-Oghil (whence a Route goes N. E. to Khotan) to Tuman Aghzi.
..	



## ROUTE NO. 15 F.

FROM KARANGHU TAGH TO CHIRA (ROUTE XII  
SECTION 4, STAGE 3), *via* CHAKAR.

? miles.

4 stages ?

*Authority*.—Map of Sir Aurel Stein's Explorations in  
Chinese Turkistan and Kansu.

*Epitome*.—No details.

No. of stage and total distance.	Details.
1 KULA RISHEK	.. Route apparently goes through Pisha, and Tiztagh to Kula Rishek.
2 JIGATAI	.. Thence over Kara-dong to Jigatai.
3 CHAKAR	
4 CHIRA	.. Direction N., 35 m., along E. of Karakash river to Chira.

## ROUTE NO. 15 F (1).

FROM PISHA TO JIGATAI *via* IGIN-DAWAN.

? miles.

2 stages ?

*Authority*.—Map of Sir Aurel Stein's Explorations in  
Chinese Turkistan and Kansu.

*Epitome*.—No details.

No. of stage and total distance.	Details.
1 KAPSALANG (10,250).	.. Route apparently leads from Pisha, E. along Pisha jilga over Igin-Dawan to Kapsalang.
2 HANGRA	.. Thence to Hangra, joining Route 15 F. at Jirgatai.



## ROUTE NO. 15 G.

FROM PISHA TO KHOTAN.

? miles.

4 stages ?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1	BUYA
2	TARIM-KISHLAK .. Over Ulugh Dawan.
3	YANGI-LANGAR
4	KHOTAN .. Viâ Kumat.

## ROUTE NO. 15 H.

FROM YOLL ARISH (ROUTE 15, SECTION 2, STAGE 10)  
TO KHOTAN viâ IMAMLÄR AND CHAKÄR.

125 miles.

6 stages.

*Authority.*—C. P. Skrine, 1924.

*Epitome.*—A route traversing large and important villages at foot of Kuen Lun, serving most of the main valleys of this section of those mountains. Sand very bad, but Citroen caterpillar transport could traverse it easily anywhere.

No. of stage and total distance.	Details.
1	IMAMLAR .. 16 m. The track leaves the Kerya R. gorge and strikes in S. W. direction
16 m.	



ROUTE NO. 15 H—*contd.*

over low sand hills and sai. Karash Langar is reached at m. 10. Here there is a little cultivation in the valley of the Aktuz. 3 m. further on the oasis of Ara-sai is crossed. At Imamlar there is a very well known shrine which marks the burial place of four imams killed in battle with the infidels in 1010 A. D. Imamlar and neighbouring oases are in the Chira administrative district.

*Water and Supplies.*—Plentiful.

2 NURA .. 16 m. General direction W.  
 (7,450'). Leaving the Imamlar  
 32 m. oasis, at m. 1 the road  
 mounts a sandy plateau which it crosses for 7 m. The going is here very heavy. At m. 6 a narrow *nullah* with trees and a little cultivation is reached. At m. 8 the track leaves the plateau and crosses a wide valley with meadows and cultivation. The village and shrine of Shulu or Shulia is reached at m. 9, the Nura river at m. 15 (1st April 1924) ran in two channels, easily fordable. Nura is a rich oasis with extensive orchards of apple and apricot.

3 CHAKAR .. 24 m. General direction N. W.  
 56 m. The going heavy at  
 first, afterwards good.  
 The road lies through the Nura oasis for 2 m. and then crosses flat desert to Yulchun Langar (m. 14). Here there is a little cultivation and a reservoir with good water. Between this point and the edge of the Chakar oasis at m. 22, seven gravel ridges averaging 300' high are crossed: the road is broad and fair throughout and presents no difficulties. Chakar lies in a fertile valley watered by streams from the Kuen Lun and is the Headquarters of the Chief Beg of the Chira District.

*Water and Supplies.*—Plentiful.

4 OTROKIR .. 26 m. The track strikes across  
 82 m. *sai* in a N. W. direc-  
 tion for 6 m. when the  
 cultivated village of Hasha is reached. From this point track crosses slopes of *sai*, coming down from the Tikelik Tagh on S. W. at 15 m., and an easy pass elevation 7,450' is crossed. Five *nullahs* at the head of the Pakhtalik Jilga are then crossed. In April 1923 the first four were dry, and the fifth contained slightly brackish water in fair quantity (water 60 horses at same time).



## ROUTE NO. 15 H—concl'd.

From this point path rises 500' to top of sandy ridge and then descends through *nullah* and out over *sai* for 5 m. to cultivation and trees of upper Otrokir (3 houses).

NOTE.—Otrokir Langar lies on the direct road between Chakar and Lop about 5 m. down the valley from upper Otrokir oasis. Water brought to the Langar from upper Otrokir in the Summer months only.

5 KUTUZ LANGAR .. 25 m. Going good over *sai* the whole way. Direction N.-N.-W. A shallow *nullah* called the Kuramlik Jilga is crossed at 6½ m. The Sake Jilga at m. 12. Neither of the *nullahs* ordinarily contains water. At m. 12½ the main road from Otrokir Langar is joined. At m. 18 the Ochik Jilga with a langar and a little cultivation is reached. This has perennial water, slightly brackish but drinkable. The Kutuz Langar is situated near an old shrine named Sultanming Yetkan Kizening mazar (Shrine of the King's daughter who died in the flower of her youth) on the very edge of the Khotan Oasis.

Water.—Plentiful from canals.

Supplies.—Of all kinds plentiful (from Lop Bazaar 4 m.).

6 KHOTAN .. 18 m. Road good through cultivation the whole way.

## ROUTE NO. 15 J.

FROM POLUR TO IMAMLAR (ACHMA) *viâ* HOMG.

27 miles.

1 stage.

Authority.—C. P. Skrine, 1924.

Epitome.—This track is not fit for wheeled vehicles but presents no difficulties for pack animals.

No. of stage and total distance.	Details.
1 IMAMLAR	.. 27 m. The track leads up the Polur river bed to Alajoi m. 2½. From this point Route 15 leads over the Kuen Lun to Tibet. Between



ROUTE NO. 15 J—*contd.*

ms. 3 and 5 the scattered farms of Hong and Arallik are passed and the track then strikes up a *nullah* to the right and crosses at m. 8 the Chirik-Alde Pass (10,000'). On the W. side of the descent is a narrow *nullah* 800' to the Kach-Kunchi Jilga, in which there is a little cultivation. Cross by the stream, the track turns up to the left and ascends the wide grassy Chata-Kir Plateau, elevation 10,000'. This is crossed for 3 m. and at m. 14 track descends a *nullah* to Zinjik Aral in the Aktuz valley. Here there are 3 or 4 farms. The valley is followed downwards to the N. for the rest of the march. Between ms. 22 and 23 the going is heavy over a ridge covered with sand-drifts and the Imamlar valley is entered. Cultivation begins at m. 24; the valley here is 1 m. wide with a long flat-topped ridge to the W.

## ROUTE NO. 15 L.

## FROM POLUR TO SURGHAK.

? miles.

8 stages ?

*Authority.*—Map of Sir Aurel Stein's Explorations in Chinese Turkistan and Kansu.

*Epitome.*—No details.

No. of stage and total distance.	Details.
1 LUISHA	.. Route apparently goes N. E. crossing river at Polur, and Keriya river at
.. Kutlish; pass Karatash Oghil, Koshodibe-Mazar.	
2 SOK TEREK (7,900').	.. Cultivation, Tikellik Dong, 10,847', Chakluk- Oghil, Kara-Lobe-
.. Oghil, Sok Terek.	
3 ACHCHAN (8,320').	
4 KARA-BULAK (9,850').	.. Pass Dambui Oghil, Pishkia Sai, Pishkia (8,420') where cultivation.
..	



ROUTE NO. 15 L.—*contd.*

5	CAMP	.. Pass cultivation at Kara
..		Dong, Ak-Saikit, Sai,
..		Tumuyar (8,170')
..		where cultivation.
6	MALGHUN	.. Via Kal Chap.
7	KAROUGHHA	.. By Sanja Sai, Sanja, culti-
..		vation, Mat-Chap.
8	SURGHAK	.. By Kourigha Sai,
..	(7,970').	



## APPENDIX A.

## MAPS OF SINKIANG.

1. Maps of Chinese Turkistan and Kansu from surveys made during the explorations of Sir A. Stein, 1900-01, 1906-08, 1913-15. These maps include:—

(a)—Index map 1 : 3 million or 47·34 miles to 1".

(b) Survey of India sheets. Serial Nos. 1—47, Scale 1 : 500,000 or 1·014" to 8 miles.

2. India and Adjacent Countries Series.

Scale 1 : 1 million or 1·014" to 16 miles.

Maps 42, 43, 51, 52 and 60.

Available at the Survey of India Office, Calcutta.

(Officer-in-Charge Map Record and Issue Office).

3. War Office Index Map.

Two  $\frac{1}{2}$  million Sheets Nos. 21 and 22 overlap part of Chinese Turkistan. Available at W. O., London.

4. Kuen Lun Range, 1 m., 1911. Aurel Stein. Published by Royal Geographical Society, London.

5. French million sheets—Pamir and Kashgar. Published by "Service Geographique" in Paris, available at Messrs. Stanford, London.



## APPENDIX B.

*Translation of some Turki and Chinese Terms.—*

BULAK	..	..	.. Spring.
CHAP	..	..	.. Hill stream.
DARYA	..	..	.. River.
DAWAN	..	..	.. Pass.
DONG	..	..	.. Hill.
Hö (Chin)	..	..	.. River.
JILGA	..	..	.. Valley.
KARAUŁ	..	..	.. Watch Station.
KUL, KOL	..	..	.. Lake.
KUM	..	..	.. Sand.
KUMUSH	..	..	.. Reeds.
KURGHAN	..	..	.. Tower.
LANGAR	..	..	.. Rest house.
MAZAR	..	..	.. Saint's tomb.
MIAO (Chin)	..	..	.. Temple.
OGHIL	..	..	.. Shepherd station.
P'AO-TUZ, PU-TUZ	..	..	.. Walled village.
SAI ..	..	..	.. Desert of stone or gravel.
SHAN (Chin)	..	..	.. Mountain.
TA-FAN (Chin)	..	..	.. Pass.
TAGH	..	..	.. Mountain.
TOGHRAK, TUGHRAK	..	..	.. Poplar.
USTANG	..	..	.. Canal.
YAILAK, YAILAGH	..	..	.. Grazing ground.



## APPENDIX C.

## NOTES ON NOMENCLATURE.

1. In this book, names are given mostly in the phonetic spelling elaborated by British officer route reporters in the past, with another spelling in brackets where there are two well known renderings or where there is doubt.

2. (a) They do not agree in very many instances with the Geographical Society's phonetic spelling, which that society is hoping to make universal in its Million Sheet series of maps. In this connection see Appendix (Place Names in Sinkiang) in M. R. on Hsin Chiang (1925 amendments.)

(b) In the future an attempt should be made to give the Geographical Society's rendering in brackets, if it differs from the spelling in the Route Book.



## APPENDIX D.

## SOME SPELLING CORRECTIONS.

<i>For</i>	<i>Read</i>
ARTISH . . . . .	ARTUSH.
AVAT . . . . .	ABAD.
BARKHATAI . . . . .	BOROKHOTAI.
BAYIK . . . . .	PAIK.
BELOWTI P. . . . .	BILAUTI P.
BESH KEREIM . . . . .	B. KARIM.
CHAM CHAMATAI . . . . .	JAM.
CHIUNG JANGAL . . . . .	CHONG JANGAL.
CHAHIL . . . . .	CHIHIL.
GIDJEK . . . . .	GHIJAK.
IGGIZ YAR . . . . .	IGHIZ YAR.
ISSOK BULAK . . . . .	ISSIK B.
JALTUBE . . . . .	YAI DOBE.
KALTI AILAK . . . . .	KALTA YAILAK.
KANJAUGAN . . . . .	KANJIGAN.
KHUSH KISHLAK . . . . .	K. KISHLAK.
KUGIAR . . . . .	KOKYAR.
KUNYA SHAH . . . . .	KOHNA SHAHR.
KUSHTIMI . . . . .	KOSH TAM.
LANGAR AWAT . . . . .	L. ABAD.
LANGTE K. . . . .	LANGTAI K.
MINTAKA AKSAI . . . . .	MING TEKKE AGHZI.
MOKULA . . . . .	MOKUILA.
MYN UI DAL . . . . .	MING YOLL OR MINYOL.
PEJAN . . . . .	PICHAN.
QUOTCH-KOR . . . . .	KUCHKAR.
SAROK KAMISH . . . . .	SARIK K.
SILOK LANGAR . . . . .	SALIK LR.
SOKH BULAK & S. RIVER . . . . .	SAWUK OR SOWAK B. & RIVER.
TANGITAI . . . . .	TANGITAR.



<i>For</i>	<i>Read.</i>
TOGHRAK DHUNG . . . .	T. DONG.
TUKAZMAT . . . .	TOKUZMAT.
TORAT . . . .	TER ART.
TUGARAK . . . .	TOGHRAK.
TUQUOBASHI . . . .	TOKOIBASHI.
UTCH TURFAN . . . .	UCH TURFAN.
UI . . . .	OI.
YALPAKTASH OR YELPAKHTASH .	YELPAKTASH.
YUPAGAY . . . .	YUPOGHA.



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**Routes in Sinkiang.  
Index to Place Names  
1925.**

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# Index to Place Names.

(EP. STANDS FOR EPITOME.)

Name.	Route.	Stage.
<b>A</b>		
Abad (Abat) (Avat) . . .	I Sec. 3 . . .	Ep., 3, 4.
" . . . . .	I (10) . . .	Ep., 4.
" . . . . .	XIV Sec. 2 . . .	3.
" Langar . . . . .	XIV (3) . . .	..
Abat . . . . .	See Abad . . .	..
Abdal . . . . .	XII (5) . . .	..
" . . . . .	XII (6) . . .	Ep.
" . . . . .	XIV Sec. 4 . . .	32.
" . . . . .	XIV P (i) . . .	..
Abdul Ghafur Langar. . .	15 Sec. 1 . . .	4.
" " " . . . . .	15 E. . . . .	..
Achal . . . . .	I (7) . . . . .	5.
Achang (Toghrak Ulang) . .	XII (1) . . . . .	10.
Achchan . . . . .	XII (2) . . . . .	1.
" . . . . .	15 L . . . . .	3.
Achchik R. . . . .	XIV D . . . . .	5.
Achchik Kudak . . . . .	XII Sec. 4 . . .	39.
Achik Aghzi . . . . .	I F . . . . .	5.
" Jilga . . . . .	" . . . . .	5.
Achik Jilga . . . . .	XIV C . . . . .	3.
Achik Kum Lake . . . . .	Index, page ii . .	Note.
Achik Kul . . . . .	Index, page ii . .	Note.
" " . . . . .	15 Sec. 2 . . . . .	4.
Achik Yusuf Qadir Khan . .	I G. (1) . . . . .	2.
Achma . . . . .	XII Sec. 4 . . . . .	4.
" . . . . .	XIV F . . . . .	1.
" . . . . .	15 J . . . . .	1.
" . . . . .	See also Imamlar . .	..
Ach Tagh . . . . .	1 Sec. 2 . . . . .	11.



Name.	Route.	Stage.
<i>A—contd.</i>		
Adunger . . . .	I Sec. 3 . . .	9
Adynkur Pass . . . .	6 . . . .	12 [note (b)], 16.
Afdigar (and R.) . . . .	2 . . . .	12, 13.
Agahakul Rabat . . . .	IX . . . .	3.
Agachat . . . .	VI A . . . .	..
Agachi Kol . . . .	VII . . . .	8.
Agh Aghzi . . . .	V (2) . . . .	1.
Aghil Bohor . . . .	2 . . . .	7, 8.
Aghil Pass R. . . .	2 . . . .	7, 8.
Agias (and R. and R. Bridge)	6 . . . .	2, 3.
Ahji Langas . . . .	15 Sec. 1 . . .	5.
A-ho-pu-la . . . .	See Arghai-Bulak	..
Aighat Karaul (and Pass and R.).	4 B . . . .	3, 4, 5.
Ai-kul . . . .	XIV Sec. 2 . . .	15.
Ajikti . . . .	XIV (3) . . . .	..
Akata . . . .	XIV (3) . . . .	..
Akaz-Aghzi . . . .	XIV Sec. 1 . . .	19.
" " . . . .	XIV (2) . . . .	..
Ak-Bagha R. . . .	XII (1) . . . .	10.
Akbait . . . .	XII . . . .	3.
Ak Bəl . . . .	IX . . . .	2.
Akberdi . . . .	V . . . .	Ep.
" (and Pass and R.)	V Sec. 2 . . . .	1, 2, 3.
Akcha . . . .	I Sec. 2 . . . .	7 (note).
Akchigh . . . .	I H . . . .	Ep.
Ak-Chigh Jilga . . . .	XIV D . . . .	6.
Akehik Karaul . . . .	XIV T. . . .	1.
Akehik . . . .	13 (1). . . .	..
Ak Dong . . . .	XIV Sec. 2 . . .	4.
" " . . . .	XIV L . . . .	Ep., 1.
Akenta . . . .	X . . . .	1.
A-ke-T'a-Ssu . . . .	XV Sec. 1 . . .	4.
Ak Gumbaz . . . .	I (10) . . . .	6.
Ak-ila . . . .	XIV D . . . .	1.
Ak Jilga . . . .	1 . . . .	..



Name.	Route.	Stage
<i>A—contd.</i>		
Ak Jilga . . . .	XIV C. . . .	4.
Akhunlung . . . .	I (10) . . . .	6.
Akhtor . . . .	I F . . . .	7.
Akilek . . . .	XII Sec. 4 . . . .	24.
Akin . . . .	XII Sec. 3 . . . .	1.
Ak Langar . . . .	VI . . . .	17.
Ak Langar . . . .	XII Sec. 3 . . . .	7.
Ak Masjid. . . .	13 . . . .	4.
" " . . . .	I C. . . .	11.
Ak-Monan-Langar . . . .	XIV F. . . .	2.
Akran Pass (and R.) . . . .	VI . . . .	13.
Ak-Jong . . . .	I M. . . .	2.
Ak Robat . . . .	XII Sec. 1 . . . .	4.
Aksaghiz . . . .	XII (1) . . . .	7.
Aksai Dawan . . . .	I F . . . .	6 (note).
Ak-Saikit . . . .	15 L . . . .	5.
Aksai river . . . .	I Sec. 2 . . . .	12.
" " . . . .	VIII . . . .	4.
Aksak Maral (Wu T'ai) . . . .	XIV Sec. 2 . . . .	5.
" " . . . .	XIV (4) . . . .	2.
Ak-Saya . . . .	15 D . . . .	1.
Aksh . . . .	XII A . . . .	15.
Aksu . . . .	I Sec. 2 . . . .	Note before Ep. 13.
[Old and new city (Yangi Shahr).]	I (7) . . . .	8.
	I (10) . . . .	Ep.
	I (11) . . . .	Ep.
	I Sec. 3 . . . .	Ep., 1.
	VI . . . .	Ep.
	IX . . . .	Ep. /
	XIV Sec. 2 . . . .	16.
	XIV (3), XII A, XIV N. . . .	..
Aksu R. . . .	III . . . .	2.
	6 . . . .	1.
	15 Sec. 2 . . . .	2.
	XII A . . . .	15.



Name.	Route.	Stage.
<i>A—contd.</i>		
Aksu La . . . . .	15 Sec. 2 . . . . .	1.
Aktagh . . . . .	XIV Sec. 1 . . . . .	Ep., 13.
" . . . . .	13 . . . . .	14.
" . . . . .	14 . . . . .	Ep.
Ak-Tagh-Bulak (Tash Bulak)	XII (8) See also Tash Bulak.	10.
Aktal . . . . .	I F . . . . .	2 (note).
Aktala . . . . .	I Sec. 1 . . . . .	11, 12.
Ak Tash . . . . .	I (8) . . . . .	2.
Ak Tash . . . . .	VI . . . . .	17.
Ak-tash . . . . .	I M . . . . .	1.
Ak-tash-Aghzi . . . . .	15 A . . . . .	3.
Ak-Tuge-Mazar . . . . .	I Sec. 1 . . . . .	11.
Aktum . . . . .	I B . . . . .	15, 16.
" . . . . .	I D . . . . .	3.
" . . . . .	XIV (4) . . . . .	1.
Ak Tumchuk . . . . .	XIV Sec. 2 . . . . .	9.
Aktuz (and valley) . . . . .	15 H . . . . .	1.
	15 J . . . . .	1.
Ak-Yar . . . . .	I (7) . . . . .	7.
Ak-Yar . . . . .	XII (2) . . . . .	2.
Ala-Aigyr (Ssu-T'ai) . . . . .	XIV Sec. 2 . . . . .	4, 7.
" " " . . . . .	XIV (4) . . . . .	2.
Alai R. . . . .	XI . . . . .	Ep.
Alaiko . . . . .	VI (1) . . . . .	..
Alajoi . . . . .	15 J. . . . .	1.
Algoi Bridge . . . . .	See Ta-pan Ho . . . . .	..
Alichur Pamir . . . . .	See Pamirs . . . . .	..
Atlai Mts. (and valley) . . . . .	I . . . . .	10 (note).
Alinazar Kurghan . . . . .	XIV Sec. 1 . . . . .	17.
Altunluk . . . . .	I F . . . . .	Ep., 6.
Alumbit Kurghan . . . . .	I E . . . . .	6.
Andijan . . . . .	VI . . . . .	17.
" . . . . .	VI (1) . . . . .	..
" . . . . .	VII . . . . .	Ep.
An-chi-hai-t'ai . . . . .	XI . . . . .	6.
An-Fu-Ch'eng . . . . .	See Chin-ho . . . . .	..



Name.	Route.	Stage.
<i>A—contd.</i>		
Anhsi . . . .	XII Sec. 4 . .	..
" . . . .	XIV Sec. 6 . .	Ep.
Ap-bang-dze . . . .	XIV (4) . .	1.
Aqtum . . . .	See Aktum . .	..
Aral . . . .	I Sec. 2 . .	13.
Aralik . . . .	15 J . .	1.
Ara Mahalla . . . .	I L . .	1.
Ara-Sai . . . .	15 H . .	1.
Aratam . . . .	XIV Sec. 6 . .	Ep.
" . . . .	XIV T . .	1.
Archebel Karaul . . . .	4 D . .	Note.
Arghai-Bulak (A-ho-pu-la) . .	XIV Sec. 3 . .	Ep., 2, 7.
Arik R. . . .	I Sec. 2 . .	13.
Armut R. . . .	4 Sec. 2 . .	3.
Arpa Bel (Pass) . . . .	V (2) . .	Ep., 2, 3 (note).
Arpa Chuchak . . . .	I Sec. 2 . .	8.
Arpalih . . . .	I E . .	3.
" . . . .	I G (1) . .	3.
" . . . .	I H . .	Ep.
Arpalik . . . .	XII D . .	21.
Arpa Dawan . . . .	V . .	Ep.
" Glen (and stream) . . . .	V (2) . .	2, 3.
Arpa Talak (and Pass) . . . .	I C . .	18.
Arpishme Bulak . . . .	XIV R . .	16.
" " . . . .	XIV S . .	Ep.
Artush . . . .	VII . .	10.
" . . . .	VII (1) . .	..
" . . . .	VIII . .	8.
" R. . . .	I Sec. 2 . .	1.
Aschi Bulak . . . .	XII Sec. 4 . .	33.
Asghanlik . . . .	XII Sec. 4 . .	33.
Ashpak R. . . .	15 A. . .	8.
Ash-Yar-Jilga . . . .	I N . .	1.
Askam Salgam nullah . . . .	I C . .	16.
Askole . . . .	3 . .	..
Atabad . . . .	2 . .	20.



Name.	Route.	Stage.
<i>A—concl'd.</i>		
Atbashi . . . .	I Sec. 2 . . . .	4.
At Bashi . . . .	VII . . . .	1.
Atchik . . . .	See Achik . . . .	..
At-oinek-dawan . . . .	I N . . . .	3.
Aturuk . . . .	XV Sec. 2 . . . .	5.
At-Yailak . . . .	XII D . . . .	3.
Avat . . . .	See Abad . . . .	..
Awat . . . .	See Yangi Abad . . . .	..
Ayak-ustang-Aghzi . . . .	XII A . . . .	9.
Azgar Sai . . . .	I B . . . .	Ep., 10, 12.
Azghaua . . . .	13 (1). . . .	..
Azghan Bulak . . . .	XIV Q . . . .	Ep.
" " . . . .	XIV R . . . .	13.
<i>B</i>		
Baba Hatum Pass . . . .	15 Sec. 1 . . . .	7.
" " " . . . .	Index, page ii . . . .	Note.
Baba Kamba Mazar . . . .	XII D . . . .	24.
Bagh . . . .	I E . . . .	5.
Baghaul . . . .	4 Sec. 1 . . . .	1.
Baghjigda . . . .	XIV (3) (i), XIV (3) (i) (A). . . .	..
Baghlik . . . .	I (7) . . . .	4.
Baghta . . . .	XIV F . . . .	1.
Bagrach Kul (lake) . . . .	XIV Sec. 3 . . . .	22, 24, 25.
Bai . . . .	I (10) . . . .	7.
Bai (Pai Cheng Hsien) . . . .	XIV Sec. 3 . . . .	6.
" . . . .	XIV N . . . .	Ep.
Bai . . . .	XV Sec. 2 . . . .	6.
Bai-bagh . . . .	XIV F . . . .	1.
Baldir . . . .	I B . . . .	7.
" . . . .	I D . . . .	6.
Balerak Turba . . . .	13 (1). . . .	..
Balti Bransa . . . .	XIV Sec. 1 . . . .	11.
Baltistan . . . .	I D . . . .	7.
Barin . . . .	I Sec. 2 . . . .	12.



Name.	Route.	Stage.
<i>B—contd.</i>		
Barkul . . . .	XIV Sec. 6 .	Ep., 11.
" . . . .	XIV G, XIV T .	..
" . . . .	XV, Sec. 2 .	..
" Dawan . . . .	XIV Sec. 6 .	Ep.
" " . . . .	XIV G, XIV T. .	..
Barskoun Pass . . . .	IX . . . .	1.
Bashagam (Haman-Kon) . . . .	XIV (7) . . . .	..
Bash Aghma . . . .	IX . . . .	Ep., 5.
Bashi R. . . . .	VIII . . . .	Ep.
Bashia Kin . . . .	XII D . . . .	21.
Bash-Kara-Shilwa . . . .	I (8) . . . .	4.
Bash-Kichiek . . . .	XII (2) . . . .	3.
" " . . . .	XII (3) . . . .	2 (note).
Bash-kichik . . . .	8 . . . .	2.
Bash Kurgan . . . .	XII (8) . . . .	2.
Bashlaika oasis . . . .	15 Sec. 2 . . . .	11.
Bash Langar . . . .	XIV D . . . .	4.
Bash-laska . . . .	15 Sec. 2 . . . .	10.
Bash-Sarghun . . . .	I M . . . .	1.
Bash Sulaghiz . . . .	XIV E . . . .	1.
Basik . . . . .	4 Sec. 1 . . . .	4.
Baskak . . . . .	XIV G . . . .	1.
Bayik (Paik) (Payik) . . . .	See Paik . . . .	..
Bay-Shur-luh . . . .	XIV Sec. 3 . . . .	16.
Bazar Dara R. . . .	2 . . . .	6.
Beck Bulak Pass . . . .	VI . . . .	13.
Bedal Pass . . . .	I Sec. 2 . . . .	10.
" " . . . .	I Sec. 3 . . . .	Ep.
Bedal Pass . . . .	IX . . . .	Ep., 2, 3.
Bedelek Su . . . .	6 . . . .	2, 3.
Bek Targhak . . . .	I F . . . .	3.
Beldiur . . . .	I B . . . .	12.
Bel Kum . . . .	XII Sec. 3 . . . .	6.
Belowti Pass . . . .	I (6) . . . .	3.
Berdish Pass . . . .	IV (1) . . . .	..
Besh Arik . . . .	XII Sec. 3 . . . .	1.
Besh Karim . . . .	I Sec. 2 . . . .	1.



Name.	Route.	Stage.
<i>B—contd.</i>		
Besh Kurghan . . .	4 Sec. 1 . . .	1.
Beshtarik . . . . .	13 . . . . .	1.
Beshtarik Dasht . . . . .	13 . . . . .	2.
Besh Toghrak . . . . .	XII Sec. 4 . . . . .	7.
Besh Toghrak . . . . .	XIV P. . . . .	7.
Besh-Toghrak-Langar . . . . .	XII Sec. 4 . . . . .	2.
" " " . . . . .	XII D . . . . .	3.
Besh Tugtak . . . . .	XII Sec. 4 . . . . .	43.
Bezillik . . . . .	I F . . . . .	4.
Bilakshi . . . . .	15 Sec. 1 . . . . .	1.
Bilangan . . . . .	XII D . . . . .	6.
Birtakai . . . . .	4 . . . . .	Ep.
" . . . . .	4 B . . . . .	4, 5.
" . . . . .	4 D . . . . .	Note.
Bjahan Sai R. . . . .	XII Sec. 4 . . . . .	31.
Bogdo Ula . . . . .	XIV Sec. 4 . . . . .	3, 4.
Bogha-iakhe-dawan . . . . .	I N . . . . .	5.
Boihal . . . . .	I Sec. 1 . . . . .	1.
Boinak Lanjar . . . . .	XIV D . . . . .	4.
" " . . . . .	XIV F . . . . .	..
Bokum . . . . .	XIV D . . . . .	2.
Bolan . . . . .	I J . . . . .	5.
Bomaga . . . . .	XIV F . . . . .	1.
Bora Sushkan . . . . .	XII A . . . . .	11.
Bori . . . . .	XIV D . . . . .	5.
Borokhoro Hills . . . . .	10 . . . . .	6.
Borotala R. . . . .	10 . . . . .	6.
Bostan . . . . .	XII D . . . . .	1.
Bostun . . . . .	Index, page ii . . . . .	Note.
Boura . . . . .	I Sec. 3 . . . . .	14.
Bokhara . . . . .	II . . . . .	..
Bora . . . . .	XIV Sec. 1 . . . . .	24, 25.
Bori . . . . .	14 . . . . .	..
Bozdong . . . . .	I N. . . . .	6.
Boz Langar . . . . .	I Sec. 2 . . . . .	3.
Brinjak Dawan . . . . .	15 E. . . . .	6.
Bughaz Langar . . . . .	15 Sec. 2 . . . . .	11.



Name.	Route.	Stage.
<i>B—concl'd.</i>		
Bugur Bazar (Lun-t'ai-Hsien)	XIV Sec. 3	14.
" " "	XIV (6)	"
" " Mts.	XIV Sec. 3	14, 18.
Bulak	XII D	3.
Bulak Bashi	2	4.
Bulak Bashi	Index, page ii	Note
Bulak-i-Murgo	XIV Sec. 1	8.
Bulunkul	V	Ep.
" (fort and lake)	V Sec. 1	"
"	V (3)	5.
"	V Sec. 2	1.
"	4	Ep.
"	4 Sec. 1	1, 4.
"	4 Sec. 2	1.
"	4 (1)	"
"	4 (B)	6.
Buramsal	5	3.
" (and Jilga)	I F	1.
" Pass	I F	Ep., 2.
Burhaddin Mazar	XII D	3.
Burhan Mazar	XIV C	4.
Burkhitai	V Sec. 1	5.
"	V (3)	1.
"	V A	"
Burundu R.	VIII	1.
Buston	14	8.
Buyar	15 G.	1.
Buz Yalgun	V Sec. 1	4.
<i>C</i>		
Chaarlun R.	I Sec. 1	10
"	I E	5.
Ch'a-ch'i	See Yakka Arik	"
Chaba Jilga	15 B	2
Chaba Maza	XIV C	3.
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Name.	Route.	Stage.
<i>C—contd.</i>		
Chadar Toghrak . . .	XIV (3) . . .	..
Chadir . . .	XIV Sec. 3 . . .	16.
Chadir Kul . . .	XIII . . .	6.
	XIV Sec. 2 . . .	Ep., 10.
Chadur Tash . . .	14 . . .	6.
Chagrargah (Shaidan ?) . . .	I C . . .	24.
Chagragil Mt. . . .	V (2) . . .	2 (note).
Chah Chil nullah . . .	V Sec. 1 . . .	3.
Chahil Gumbaz . . .	I Sec. 1 . . .	8, 9, 10.
" " . . .	I (5) . . .	2.
" " . . .	I E . . .	6.
" " . . .	I G (1) . . .	3.
Chai-chou . . .	See Charchi . . .	..
Chajosh Jilga . . .	XIV Sec. I . . .	..
Chakar . . .	15 F . . .	3.
" . . .	15 H . . .	3, 4 (Note).
Chakluk-Oghil . . .	15 L . . .	2.
Chakmak . . .	VI A . . .	..
" . . .	VI (1) . . .	..
" . . .	VII . . .	7.
Chalik Mabuse . . .	See Khalik . . .	..
Chalkoide Mazar . . .	I (9) . . .	..
Chal-oghil . . .	XII D . . .	5.
Cham . . .	Sec Jam . . .	..
Chamatai . . .	See Cham . . .	..
Chamalung . . .	XII Sec. I . . .	3.
Chambuz Jilga . . .	I F . . .	2 (Note A).
Chamsing . . .	XIV Sec. I . . .	4.
Chamuluh . . .	I H . . .	Ep.
Chang-Chenmo . . .	XIV Sec. 1 . . .	Ep.
" " . . .	11 . . .	6.
" " . . .	14 . . .	10 (Note).
Ch'ang-Chi Hsien . . .	XI . . .	1.
Changdze . . .	XIII . . .	6, 7.
Chang Jangal . . .	11 . . .	5.
Chang-la . . .	XIV Sec. 1 . . .	Ep.
" . . .	11 . . .	Ep. 2.



Name.	Route.	Stage.
<i>C—contd.</i>		
Chang-lui-shun . . .	XIV Sec. 6 . . .	Ep.
Chang Tash lake . . .	XIV Sec. 1 . . .	8.
Chapchal Pass . . .	I Sec. 3 . . .	14.
Chapman Aghzi-Kol . . .	XIV P . . .	3.
Chara . . .	XIV P. . .	3.
Charak . . .	I D . . .	1.
„ Istang . . .	I D . . .	1.
Charbagh . . .	XIV Sec. 2 . . .	8.
Charchen . . .	See Cherchen . . .	..
Charchi (Chai-chou) . . .	XIV Sec. 3 . . .	18.
Charkhlik . . .	XII Sec. 4 . . .	26, 29.
„ . . .	XII (4), XII (6) . . .	..
„ . . .	XII P . . .	Ep., 11.
„ . . .	Index, page ii . . .	Note.
Charshamba . . .	XIV Sec. 2 . . .	1.
Char-Shamba-Bazar . . .	XII D . . .	24.
Chash . . .	15 E . . .	6.
Chashman. . . .	I Sec. 1 . . .	1, 7.
Chat . . .	I F . . .	Ep., 3.
Chata-Kir . . .	15 J . . .	1.
Chaurich Qari Maghio. . .	I C . . .	18.
Che-ka-lu Chu'an . . .	XIV Sec. 6 . . .	7.
Chelakturuk . . .	6 . . .	5.
Chengleik . . .	XII Sec. 4 . . .	17.
Cherchen . . .	XII Sec. 4 . . .	Ep., 19.
„ . . .	XII (i) . . .	16.
„ . . .	XII (2) . . .	5.
„ . . .	XII (3) . . .	..
„ . . .	Index, page iii . . .	Note.
„ R. . . .	XII Sec. 4 . . .	20.
„ „ . . .	XII (2) . . .	3.
„ „ . . .	XII (3) . . .	2 (Note).
„ „ . . .	XII (4) . . .	..
Chettike . . .	I (8) . . .	2.



Name.	Route.	Stage.
<i>C—contd.</i>		
Chibra . . . . .	XIV Sec. 1 . . . . .	13.
Chi-Chi-Ts'ao . . . . .	XIV Sec. 4 . . . . .	5.
Chichiklik Gumbaz . . . . .	I Sec. 1 . . . . .	8.
„ Maidan . . . . .	„ . . . . .	8.
„ Pass . . . . .	I (5) . . . . .	1.
Chigar . . . . .	II . . . . .	4.
Chigelik . . . . .	XII (5) . . . . .	..
„ . . . . .	XIV P . . . . .	9.
Chigelek-Ortang . . . . .	XIV P . . . . .	5.
Chighmen Ayaghi . . . . .	I G (1) . . . . .	2.
„ Jilga . . . . .	„ . . . . .	2, 3.
Chigilik . . . . .	I (8) . . . . .	2.
Chiklik . . . . .	13 . . . . .	5.
Chigmen . . . . .	I H . . . . .	Ep.
Chigmur Jilga . . . . .	I H . . . . .	Ep.
Chikobashi . . . . .	XIV C. . . . .	3.
Chi-ko-ching-tzu . . . . .	XIV Sec. 6 . . . . .	8, 9.
„ „ . . . . .	XVI . . . . .	1 (Note).
Chikor . . . . .	2 . . . . .	13.
Chiktam . . . . .	XVI . . . . .	1 (Note).
„ . . . . .	XVI B . . . . .	..
Chilan . . . . .	XIV Sec. 2 . . . . .	13.
„ . . . . .	XIV (5) . . . . .	..
Chimen . . . . .	XII D . . . . .	23.
Chimgan Ayaghi (and R) . . . . .	I F . . . . .	3.
„ Jilga . . . . .	„ . . . . .	5 [Note (b)].
Chimbaza . . . . .	X . . . . .	3.
Chi-mu-sa . . . . .	XIV Sec. 5 . . . . .	1.
Chindeilik . . . . .	XII Sec. 4 . . . . .	35.
Ch'ing Huai-ho-tzu . . . . .	See Towilgha . . . . .	..
Ch'ing-Sui-Ch'eng (Sehi-Ko) . . . . .	I Sec. 4 . . . . .	14.
Chin-ho (An-Fu-Ch'eng) . . . . .	I Sec. 4 . . . . .	9.
„ . . . . .	XI . . . . .	7.
Chini-bagh . . . . .	XII D . . . . .	25.
Chin-lung-kai-tzu . . . . .	XIV Sec. 5 . . . . .	5.
Chin-pa-ch'uan . . . . .	XV Sec. 1 . . . . .	9.



Name.	Route.	Stage.
<i>C—contd.</i>		
Chipjak (Woojuk) R . . .	XIV Sec. 1 . . .	10.
Chira . . . . .	XII Sec. 4 . . .	3.
" . . . . .	15 F. . . . .	4.
" . . . . .	15 H . . . . .	3.
Chiragh Saldi . . . . .	2 . . . . .	4.
" " . . . . .	13 . . . . .	9 and Note.
Chiragh Tagh . . . . .	V Sec. 2 . . . . .	3
Chirchiganak . . . . .	4 C . . . . .	Ep.
Chirik Alde Pass . . . . .	15 J . . . . .	1.
Chi-T'ai-Hsien . . . . .	XIV Sec. 6 . . .	13.
	XV Sec. 1 . . . .	2.
Chitala . . . . .	XII D . . . . .	3.
Chitan-Oghil . . . . .	XII D . . . . .	6.
Chikghanik-sai . . . . .	XII (1) . . . . .	11.
Chizganlik . . . . .	14 . . . . .	5.
Chochu Jilga . . . . .	XIV C . . . . .	1.
Chokkur . . . . .	XIV Sec. 3 . . .	24.
Cholak . . . . .	I (7) . . . . .	1.
" Dawan . . . . .	I (7) . . . . .	3.
Cholak-Mazar-Sasik-Kol . . . . .	XII D . . . . .	3.
Chong-Akim . . . . .	XIV R. . . . .	14.
Chong-Jangal sai . . . . .	XII (3) . . . . .	5.
Chong-Kara-Gol . . . . .	I Sec. 2 . . . . .	4.
	I (7) . . . . .	..
" " . . . . .	I M . . . . .	2.
Chong Karaul . . . . .	I Sec. 1 . . . . .	Ep., 7, 12.
" " . . . . .	VII . . . . .	11.
" " . . . . .	5 . . . . .	1.
Chong Kotai . . . . .	V . . . . .	Ep.
Chong Kol . . . . .	XIV P . . . . .	2.
Chong Kul . . . . .	XII Sec. 4 . . .	22.
Chong-Terik . . . . .	4 B . . . . .	6.
Chon Tunshuk . . . . .	XII A . . . . .	11.
Chong Yailik . . . . .	8 . . . . .	3.
Chongza . . . . .	XIII . . . . .	6.
Chopkhana Jilga . . . . .	I F . . . . .	4, 5 (Note B).
Chorchuk (Tzu-ni-Ch'uan) . . . . .	XIV Sec. 3 . . .	21.



Name.	Route.	Stage.
<i>C—concl'd.</i>		
Chorchuk (Tzu-ni-Ch'uan)	XIV (7)	..
Chubeleg	I D	1.
Chuchul (valley and stream)	V (2)	3.
Chuchu Diwan	XIV (2)	..
Chul-abad (Ta-lo-pa)	XIV Sec. 3	12.
Chulag Mana	I D	3.
Chulak Langar	XII Sec. 3	2.
Chuguchak	See Tarbagatai	..
Chukkeravil	4 Sec. 2	1.
Chukwin	2	15.
Chundi	I D	5, 6.
Chung Jangal	I A	8.
Ch'un-pa Ho	XIV Sec. 3	14.
Chupan Jurab	I C	21.
Churga	See Shuga	..
Churga (T-feh-shui)	XIV Sec. 3	3.
Chur Kuduk	XIV Sec. 2	14.
Curzon Mts.	15 Sec. 2.	1.
<i>D</i>		
Dabzi Yar	I N	3.
Dafdar	I Sec. 1	4.
"	1	..
"	I A	1.
	I A (1)	Ep.
Dalai Kughan	XII (1)	13.
"	XII (3)	2 (Note).
Dambui-Oghil	15 L	4.
Dangalchi	I J	2.
Danish Aral	XII A	13.
Dansir	11	6.
Danzil	XIV Sec. 3	22.
Dardul Jilga	I G (1)	3.
" Mt.	"	3.



Name.	Route.	Stage.
<i>D—contd.</i>		
Darreh Kachek Istang . . . . .	I C . . . . .	21.
Darshart . . . . .	I Sec. 1 . . . . .	7
„ . . . . .	I (5) . . . . .	..
	4 Sec. 1 . . . . .	1.
Dastas-Ata . . . . .	I H . . . . .	Ep.
Dasti-i-Bora . . . . .	14 . . . . .	2.
Data (Ta-ho) R. . . . .	XIV Sec. 4 . . . . .	1.
Dawan Shan . . . . .	XIV Sec. 4 . . . . .	3.
Depsang . . . . .	11 . . . . .	6.
Depsang Plains . . . . .	XIV Sec. 1 . . . . .	Ep., 10.
Diger La . . . . .	XIV (1) . . . . .	<i>Vide</i> XIV Sec. 1, St. 3.
Dikut . . . . .	2 . . . . .	17.
Dinar R. . . . .	See Ch'un-pa Ho . . . . .	..
Djarkent (Semirechia) . . . . .	X . . . . .	..
Dobaku . . . . .	See Doboka . . . . .	..
Doboka Dawan . . . . .	XII (8) . . . . .	13.
„ R. . . . .	„ . . . . .	15.
Dojin . . . . .	XIV F . . . . .	1.
Dolata Begulda . . . . .	XIV Sec. 1 . . . . .	10.
Dombak . . . . .	XIV G . . . . .	1.
	XIV J . . . . .	1.
Domesir . . . . .	I D . . . . .	6.
Dongair . . . . .	I C . . . . .	17.
Dongklik . . . . .	XII Sec. 4 . . . . .	33, 34.
„ . . . . .	XII (7), XII (8) . . . . .	..
„ . . . . .	Index, page ii . . . . .	Note.
Donglik . . . . .	See Dongklik . . . . .	..
Dong Satna . . . . .	XII D . . . . .	4.
Dore . . . . .	XIV J . . . . .	2.
„ . . . . .	15 A . . . . .	9 (Note).
„ . . . . .	15 B . . . . .	2.
„ . . . . .	15 C . . . . .	..
Dorral . . . . .	XIV P . . . . .	6.
Doshamba . . . . .	See Khan Arik . . . . .	..
Dungan Mazar . . . . .	XIII . . . . .	8.



Name.	Route.	Stage.
<i>D—concl.</i>		
Dunglik . . . .	See Dongklik . . . .	..
Dong Jigda . . . .	I Sec. 2 . . . .	4.
" " . . . .	I (7) . . . .	1.
Drugub (Durgu) . . . .	11 . . . .	4, 5.
Duba . . . .	13 . . . .	7.
Dube Oghil . . . .	XII D . . . .	2.
Dumuka . . . .	XII Sec. 4 . . . .	4.
Durbin Jangal . . . .	3 (1) . . . .	..
Durgu . . . .	See Drugub . . . .	..
Duva R. . . .	XIV J . . . .	2.
<i>E</i>		
Ebi Nor . . . .	10 . . . .	8.
Edira . . . .	XIV T . . . .	1.
Egarmansa Jilga . . . .	I F . . . .	5 (Note B).
Egerche . . . .	See Igerchi . . . .	..
Eghin . . . .	VI . . . .	11, 12.
Eghi Zarak Kurghan (Pichanliq). . . .	I C . . . .	17, 18.
" " " . . . .	I D . . . .	8.
Ekezek . . . .	VI . . . .	9.
Elesup . . . .	XII D . . . .	25.
El-hongdu . . . .	XIV Sec. 2 . . . .	15.
Elighan Dawan . . . .	XIV R . . . .	6.
Elisen Bulak . . . .	XIV R . . . .	7.
" Dawan . . . .	XIV R . . . .	9.
Ek Shamba . . . .	I K . . . .	1.
Emil R . . . .	10 . . . .	13.
Ender R . . . .	XII (1) . . . .	7.
Endere R . . . .	XII Sec. 4 . . . .	15.
Enkur . . . .	I C . . . .	17.
Erh-pu . . . .	XIV Sec. 6 . . . .	2.
Erh-T'ai . . . .	10 . . . .	3, 4.



Name.	Route.	Stage.
<b>F</b>		
Faizabad . . . .	XIII . . . .	3.
" . . . .	I K . . . .	1.
" . . . .	I J . . . .	1.
Fakhalik . . . .	I N . . . .	3.
Ferghana . . . .	VI (1) . . . .	..
Fu-K'ang Hsien . . . .	XIV Sec. 5 . . . .	Ep., 5.
Fyzabad . . . .	See Faizabad . . . .	..
<b>G</b>		
Gabrakot . . . .	XII D . . . .	3.
Gacha R. . . .	See Gezge R. . . .	..
Gai-Aghzi . . . .	I L . . . .	..
Geelan . . . .	I Sec. 3 . . . .	11.
Gendum . . . .	XII (1) . . . .	7. ..
Gez . . . .	I Sec. 1 . . . .	7.
" . . . .	5 . . . .	4, 5.
" . . . .	4 Sec. 1 . . . .	1.
Gez Darya (R.) . . . .	V Sec. 1 . . . .	3.
" . . . .	V (1) . . . .	1, 2, 3.
" . . . .	V (2) . . . .	Ep., 1, 3.
" (and valley) . . . .	V (4) . . . .	1, 2.
" . . . .	4 Sec. 1 . . . .	4.
" . . . .	4 Sec. 2 . . . .	1.
" . . . .	I F . . . .	5 (and Note B).
" Defile . . . .	V . . . .	Ep.
" " . . . .	V (3) . . . .	5.
Gez Karaul . . . .	V Sec. 1 . . . .	2, 3.
" " . . . .	V (1) . . . .	Ep., 3
" " . . . .	V (2) . . . .	Ep., 3.
" " . . . .	V (3) . . . .	4.
" " . . . .	V (4) . . . .	3.
" Valley . . . .	V . . . .	Ep.
Gezge (Gacha) R. . . .	XIV Sec. 1 . . . .	19.
Ghadhang . . . .	XII Sec. 4 . . . .	7.



Name.	Route.	Stage.
<i>G—contd.</i>		
Gharasar Mt. . . . .	2 . . . . .	15.
Ghar Mazar . . . . .	I C . . . . .	19.
Ghaz Kul . . . . .	XIV (3) . . . . .	...
Ghaz Kum . . . . .	XII A . . . . .	14.
Ghijak (and Pass) . . . . .	5 . . . . .	Ep., 1, 2.
Ghijak Nullah . . . . .	I F . . . . .	3.
Ghijak Stream . . . . .	I Sec. 1 . . . . .	12.
Ghokulung-aghzi . . . . .	15 B . . . . .	2.
Ghuchashman . . . . .	I C . . . . .	22.
Ghulja Bash Pass . . . . .	I Sec. 2 . . . . .	Ep., 6.
" " " Nullah . . . . .	I Sec. 2 . . . . .	8.
Gidjek . . . . .	4 (1) . . . . .	..
" Post . . . . .	4 Sec. 1 . . . . .	2.
Gieke Pass . . . . .	6 . . . . .	3.
Gircha . . . . .	1 . . . . .	..
Giz Langar . . . . .	I L . . . . .	2.
Gold Hole . . . . .	15 Sec. 2 . . . . .	7.
Goo Goot Plain . . . . .	15 Sec. 2 . . . . .	3.
Goj-Jilga Dawan . . . . .	I N . . . . .	5.
Gox Jilga . . . . .	13 (1) . . . . .	..
Grim Pass . . . . .	See Sanju Pass . . . . .	..
Grunj Karlik . . . . .	XIV Sec. 1 . . . . .	16.
" . . . . .	14 . . . . .	9, 10.
Gudache . . . . .	XII (2) . . . . .	1.
Gulbacher . . . . .	14 . . . . .	10.
Gulcha . . . . .	VI . . . . .	4.
Gulchumen Mazar . . . . .	XIV (3) (i) . . . . .	..
Gul Khwaja Uwin . . . . .	I Sec. 1 . . . . .	Ep., 1.
Gulmit . . . . .	2 . . . . .	19.
Guma (Bazar) . . . . .	XII Sec. 3 . . . . .	Ep., 3.
" . . . . .	XIV Sec. 1 . . . . .	Ep.
" . . . . .	XIV D . . . . .	4.
Gumbaz . . . . .	XIV N . . . . .	Ep.
Gang Masjidi . . . . .	XII A . . . . .	10.



Name.	Route.	Stage.
<i>G—conclt.</i>		
Gurunz Kaldi . . .	13 . . .	8.
Gusherbrum Jilga . . .	3 (1) . . .	..
<i>H</i>		
Habib Bibi Mazar . . .	I J . . .	3.
Hafiz Mirab . . .	XIV L . . .	2.
Hajib Langar . . .	XII Sec. 3 . . .	3.
Haman-Kou . . .	See Bashajam . . .	..
Hamed-i-dasht . . .	XII Sec. I . . .	4.
Hami . . .	XIV Sec. 6 . . .	Ep., 1, 2, 9, 11.
" . . .	XIV T . . .	..
" . . .	XV Sec. 2 . . .	6 (Note).
" . . .	XVI . . .	Ep.
Hangra . . .	15 F (1) . . .	2.
Hasa . . .	I. H . . .	Ep.
Hasan Bugra . . .	14 . . .	1.
Hasha . . .	15 H . . .	4.
Ha-si-t'ou . . .	XIV Sec. 3 . . .	21.
Hassan Boghra Mazar . . .	XIV D . . .	4.
Hazaraz . . .	I B . . .	Ep., 10.
Hedin's Pool . . .	XII A . . .	10.
Hei-mi-tzu-tien . . .	See Kushtimi . . .	..
Himis . . .	11 . . .	2.
Hindi Jilga . . .	15 B . . .	1.
Hindu Kush Dawan . . .	15 A . . .	2.
Ho-gulu (Hou-kou) . . .	XIV Sec. 4 . . .	2.
" . . .	XVI A . . .	Ep., 3
" R. . .	XIV Sec. 4. . .	3.
Hong . . .	15 J . . .	1.
Ho-tzu . . .	See Kizil . . .	..
Hou-kou . . .	See Ho-gulu . . .	..
Hsin-chu'an . . .	XIV Sec. 5 . . .	1.
Hsi-Chi'rh . . .	XIV Sec. 6 . . .	13.
Hsin-Cheng . . .	X . . .	4.



Name.	Route.	Stage.
<i>H—concl'd.</i>		
Hsin-Cheng-tze . . .	XIV Sec. 3 . . .	25.
Hsin-hsiang-tzu . . .	XV Sec. 2 . . .	2.
Hsun-fang-tui . . .	XIV Sec. 3 . . .	29.
Huang Shan . . .	XIV Sec. 5 . . .	2 (Note).
Hunza . . .	III . . .	Ep.
" . . .	2 . . .	21.
Hu T'u Pao . . .	XI . . .	2.
<i>I</i>		
Igar Saldi . . .	2 . . .	5.
Igerchi Tagh . . .	XIV Sec. 3 . . .	26.
Igin Dawan . . .	15 F (1) . . .	1.
Iggiz Yar . . .	I Sec. 1 . . .	Ep., 12.
" . . .	I G . . .	"
" . . .	XII Sec. 1 . . .	3.
" . . .	I E . . .	Ep., 15.
Ilacha . . .	I (8) . . .	3.
Ileklik . . .	I (10) . . .	3.
Ili . . .	See Kuldja . . .	"
Ili-fu . . .	See Suidun . . .	"
Ili R. . .	I (13) . . .	Ep.
" . . .	I Sec. 3. . .	16.
" . . .	X . . .	4.
" . . .	7 . . .	Ep., 3.
" . . .	10 . . .	4.
Ili Su (Taghdumbash) . . .	I A . . .	4.
" . . .	I B . . .	3.
" Pass . . .	See Kuran Pass . . .	"
" Ravine . . .	I B . . .	Ep.
" Valley . . .	I A . . .	6, 7.
Ilkache . . .	I (10) . . .	5.
Imamlar . . .	15 H . . .	1, 2.
" (near Achma) . . .	15 J . . .	1.
Inchike darya . . .	XIV O (1) . . .	"
Indus R. . .	XIV (1) <i>vide</i> XIV, Sec. I., St. 3.	



Name.	Route.	Stage.
<i>I—contd.</i>		
Innis . . . .	I C. . . .	14.
Irigniyak Gumbad . . . .	4 Sec. 1 . . . .	3.
Irigu Rum . . . .	V Sec. 1 . . . .	2.
Irkeshtam . . . .	VI . . . .	Ep., 10.
Ishkaga . . . .	I H . . . .	Ep.
Ishalanchi . . . .	I (11) . . . .	1.
Ishma (Yeh-Yung-Kou) . . . .	XIV Sec. 3 . . . .	17.
Ishtik Bash . . . .	IX . . . .	2.
Islak Kurghan . . . .	VII . . . .	9.
Islamabad . . . .	XII A . . . .	2.
Islak-oghil . . . .	I N . . . .	5.
Issik Karaul . . . .	VIII . . . .	7.
Issok Bulak . . . .	I B . . . .	2.
Issyk Kul . . . .	IX . . . .	2.
Ittig plateau . . . .	VI . . . .	11.
Ittullah-Khan-sai . . . .	XII (1) . . . .	6.
I-wan-Chu'an . . . .	XIV Sec. 6 . . . .	6.
Ivoulong . . . .	I C . . . .	9.
<b>J</b>		
Jadowa (Yai Dobe ?) . . . .	See Yai Dobe . . . .	..
Jaghauzi . . . .	V Sec. 1 . . . .	2.
Jaidi . . . .	See Yaida Urteng . . . .	..
Jailo . . . .	I Sec. 2 . . . .	6.
Jalantash . . . .	VIII . . . .	6.
Jam (Cham or Chamatai) . . . .	I Sec. 3 . . . .	Ep., 2.
" . . . .	XIV Sec. 3 . . . .	1.
" . . . .	XIV N . . . .	Ep.
" R. . . .	XIV Sec. 3 . . . .	1, 2.
Jambil Pass . . . .	6 . . . .	9, 10.
Jan-bulak . . . .	XII (8) . . . .	5.
Jandar . . . .	XIV Sec. 1 . . . .	18.
Jandarar ridqe . . . .	See Muzart . . . .	..
Jan Jurek . . . .	IX . . . .	1.



Name.	Route.	Stage.
<i>J—concl'd.</i>		
Jhimpang . . .	7 . . .	1.
Jidjilik-aral . . .	XII A . . .	12.
Jigatai . . .	15 F . . .	2.
" . . .	15 F (1) . . .	2.
Jigda-Akin . . .	XII (3) . . .	1.
Jigda-bulak . . .	I H . . .	5.
" " Pass . . .	I (11) . . .	Ep., 3.
" " Dawan . . .	I N . . .	5.
Jigdalik Oghil . . .	XII (4) . . .	..
Jilak Su . . .	I Sec. 2 . . .	8.
Jityr Pass . . .	VI A (1) . . .	..
Jir Pass . . .	VI A (1) . . .	..
Jirgelan . . .	6 . . .	6, 7, 9.
" (Big, middle and little). . .	7 . . .	Ep., 1.
" Bridge . . .	See Tekes R. Bridge. . .	..
Johnson Dawan. . .	See Khitai Dawan . . .	..
Julia Kuduk . . .	VI . . .	1.
Jurgat Gumbaz . . .	I Sec. 1 . . .	5.
Jur Kapa . . .	4 Sec. 1 . . .	4.
<i>K (SEE ALSO Q.).</i>		
Kacheche . . .	I N . . .	1.
Kach-Kunchi Jilga . . .	15 J . . .	1.
Kachun . . .	XII D . . .	1.
Kadalik . . .	XII (3) . . .	2.
Kai Bulak . . .	I Sec. 2 . . .	4.
Kainak . . .	I Sec. 3 . . .	15.
Kaindi Pass . . .	VIII . . .	Ep.
Kaindu R. . .	VIII . . .	2.
Kala-chi-malesy . . .	7 . . .	2.
Kalama-oghil . . .	XII (1) . . .	8.
Kal Chap . . .	15 L . . .	6.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kalchuskun . . . . .	2 . . . . .	1.
Kalkee . . . . .	XIV Sec. 1 . . . . .	20.
Kalmah-Chuslhte . . . . .	XIV P . . . . .	4.
Kalmak-Olgan-Bulak . . . . .	XIV R . . . . .	1.
Kalta Kerim . . . . .	XII Sec. 4 . . . . .	11.
Kaltalah . . . . .	I D . . . . .	2.
Kalta Yailaq . . . . .	I Sec. 2 . . . . .	2.
Kalungri . . . . .	15 Sec. 2 . . . . .	8.
Kan . . . . .	I Sec. 3 . . . . .	14.
" . . . . .	I (13) . . . . .	Ep.
Kanbaskan R. . . . .	2 . . . . .	4.
Kandar Pass . . . . .	I C . . . . .	24.
Kang (Pung Ch'ang Kou) . . . . .	8 . . . . .	1.
Kangar . . . . .	XIV D . . . . .	3.
Kang Sarigh . . . . .	XII Sec. 4 . . . . .	10.
Kangshewar . . . . .	15 Sec. 1 . . . . .	2.
" . . . . .	15 A . . . . .	..
Kangshiwar . . . . .	5 . . . . .	5.
Kanjungan . . . . .	VI . . . . .	15.
" . . . . .	VI A . . . . .	..
" R. . . . .	VI . . . . .	16.
Kansu . . . . .	XII . . . . .	..
" . . . . .	XII Sec. 4 . . . . .	50.
" . . . . .	XIV Sec. 6 . . . . .	Ep.
Kapa . . . . .	XII (1) . . . . .	12.
Kapki Jilga . . . . .	I H . . . . .	Ep.
Kapsalang . . . . .	15 F (I) . . . . .	1.
Kaptar Mazar . . . . .	XII Sec. 3 . . . . .	8.
Kapul Bulak . . . . .	I (7) . . . . .	1.
Kara Art Pass . . . . .	4 (2) . . . . .	..
" " Su. . . . .	4 Sec. 2 . . . . .	4, 5.
Kara Bel Pass . . . . .	4 C . . . . .	Ep.
Kara Bulak . . . . .	I (11) . . . . .	3.
" . . . . .	I N . . . . .	5.
" . . . . .	15 L . . . . .	4.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kara-Burur . . .	XII D . . .	2.
Karachukar . . .	I A . . .	8.
Karachukar . . .	I Sec. 1 . . .	1.
„ stream . . .	I (1) . . .	3.
	I Sec. 1 . . .	3.
Karachukar R. . .	III . . .	1.
Kara Dawan . . .	VI . . .	11.
Kara Dawan . . .	XIV Sec. 3 . . .	14.
Kara Dawan . . .	8 . . .	..
Kara Dawan . . .	I B . . .	8, 9.
Kara Dawan . . .	I E. . . .	4.
Kara Dong . . .	15 L . . .	5.
Karagay Tash . . .	6 . . .	9.
„ „ Pass . . .	6 . . .	..
„ „ R. . . .	6 . . .	10.
Karaghaste . . .	XIV P . . .	4.
Karagholak . . .	VII . . .	2.
Karagor Kull . . .	I Sec. 2. . . .	7.
Kara-Jalpak . . .	I (8) . . .	2
„ „ . . .	I (9) . . .	..
Kara Jilga Pass . . .	VI A (1) . . .	..
Karajung . . .	6 . . .	6, 12 [note (b)].
Kara-Kash . . .	XII A. . . .	Ep.
Karakash . . .	15 D . . .	1.
Karakash R. . .	XII Sec. 3. . .	Ep. 9.
„ . . .	XIV Sec. 1. . .	15, 16, 17.
„ . . .	11 . . .	Ep.
„ . . .	14 . . .	9, 10.
„ . . .	15 Sec. 1 . . .	4.
„ . . .	XII A . . .	Ep.
„ . . .	XIV B . . .	..
„ . . .	15 A . . .	8, 10.
„ . . .	15 B . . .	1.
„ . . .	15 D . . .	1.
„ . . .	15 F. . . .	4.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kara Khan . . .	XII D . . .	1.
Kara Kichik . . .	I N . . .	3.
Kara Kishmak . . .	XIV C. . .	1, 2.
Kara Kizil (Yushou-Kou) . . .	XIV Sec. 3 . . .	25.
Karakoram Pass . . .	XIV Sec. 1 . . .	Ep.
" . . .	3 . . .	Ep.
" River . . .	XIV Sec. 1 . . .	11, 13.
Kara Kul . . .	V (3) . . .	5.
" . . .	4 Sec. 1 . . .	Ep., 4.
" . . .	5 . . .	4.
" (South) Little . . .	5 . . .	5.
Kara Kul . . .	XIV . . .	6.
Kara Kul R. . .	V (3) . . .	5.
Karakul Gumbad . . .	4 Sec. 1 . . .	4.
Kara Kulchun . . .	XIII . . .	8, 9.
Karakum . . .	XII Sec. 1. . .	4.
" . . .	XII (2) . . .	4.
" . . .	XII (3) . . .	1.
" . . .	XIV O . . .	Ep.
" . . .	XIV P . . .	1.
Karak Ya Pass . . .	4 B . . .	1.
Kara-Lobe-Oghil . . .	15 L . . .	2.
Kara-Muran R. . .	XII (1) . . .	14.
Karangalik . . .	4 C . . .	..
Karangu Tagh . . .	15 E . . .	3.
" . . .	15 F . . .	..
Kara Nor . . .	XII Sec. 4 . . .	48.
Kara-Sai . . .	XII (1) . . .	6.
Kara Sai . . .	Index, page 11 . . .	Note.
Karashah . . .	6 . . .	12, 28.
Kara-Shahr . . .	XIV Sec. 2. . .	Ep.
Karashar (Yen-ch'i-Fu) . . .	XIV Sec. 3. . .	22.
" . . .	6 . . .	Ep., 10, 12 [Notes (c) and (d)], 18, 25.



Name.	Route.	Stage.
<i>K—contd.</i>		
Karashar R. . . . .	XIV Sec. 3 . . . . .	22.
„ R. . . . .	6 . . . . .	24, 25, 26, 27.
Karash Langar . . . . .	15 H. . . . .	1.
Karashtarim . . . . .	2 . . . . .	5.
Kara-Singer . . . . .	XV Sec. 2 . . . . .	5.
Kara-su . . . . .	I Sec. 1 . . . . .	7.
„ . . . . .	V Sec. 2 . . . . .	1.
	4 Sec. 1 . . . . .	2.
	4 (1) . . . . .	..
	5 . . . . .	7.
Kara Su . . . . .	IX . . . . .	2.
Kara Su . . . . .	XII Sec. 1 . . . . .	1.
Kara Su . . . . .	XIV D . . . . .	1.
Karatagh . . . . .	I C . . . . .	7.
„ Bulak . . . . .	2 . . . . .	10.
Karatagh . . . . .	XIV R . . . . .	2.
Karatai . . . . .	XIV P . . . . .	7.
Karatam . . . . .	I (13) . . . . .	Ep.
Kara Tash Chab . . . . .	5 . . . . .	2.
Karatash Mazar . . . . .	15 B . . . . .	2.
„ . . . . .	XIV C. . . . .	4.
Karatash Oghil . . . . .	15 L. . . . .	1.
Kara Tash Pass . . . . .	5. . . . .	Ep., 4.
Kara Tash R. . . . .	5 . . . . .	2, 3.
Karatash Valley . . . . .	I Sec. 1. . . . .	8.
„ . . . . .	I F . . . . .	Ep., 3, 4, 5.
Karatumush Aghzi . . . . .	I F . . . . .	4.
„ Jilga . . . . .	I F. . . . .	4.
Kara Ulghun . . . . .	XIV O (i) . . . . .	..
Karaul Glen . . . . .	I G (1) . . . . .	4.
Karawal Tapa . . . . .	IX . . . . .	2.
Karawas . . . . .	I Sec. 1 . . . . .	13.
Kara Yalung . . . . .	XIII . . . . .	6.
Karayoll . . . . .	I. Sec. 2 . . . . .	4.
Kara Yulgun . . . . .	XIII . . . . .	6.



Name.	Route.	Stage.
K—contd.		
Kara Yulgum . . .	XIV Sec. 3 . . .	2, 3.
Karchar . . .	XIV Sec. 1 . . .	3.
Karchung . . .	14 . . .	3.
Kardong . . .	XIV Sec. 1 . . .	2.
„ Pass . . .	XIV Sec. 1 . . .	Ep., 1.
„ Pass . . .	XIV (1) <i>vide</i> XIV, Sec. 1.	3.
Kare-Teke-Dawan . . .	VII (1) . . .	..
Karghalik (Q) . . .	XII Sec. 3 . . .	Ep. 1, 6, 7.
„ . . .	XII Sec. 4 . . .	Ep.
„ . . .	XIV Sec. 1 . . .	Ep., 25, 27.
„ . . .	13 . . .	..
„ . . .	14 . . .	Ep.
„ . . .	I D. . .	5.
„ . . .	XIV (3) (i) A . . .	..
Karghan . . .	8 . . .	4, 5.
Kargha-Toghrak . . .	XIV F. . .	2.
Kargos . . .	XIV Sec. 1 . . .	17.
Karguj . . .	XIV Sec. 1. . .	17.
Karkol Valley . . .	I Sec. 3 . . .	7.
Karmukchi . . .	XIV Sec. 6 . . .	Ep.
Karougha . . .	15 L . . .	7, 8.
Karuk Chol . . .	XII D . . .	21.
Karvankul . . .	VI . . .	16.
Kasajoi . . .	I M . . .	2.
Kashka Su (Kashgar Su ?) . . .	I Sec. 1 . . .	10.
„ „ (Pass) . . .	I Sec. 1 . . .	10.
„ „ R. . .	VIII . . .	2.
Kashgar . . .	I Sec. 1 . . .	Ep., 15.
„ . . .	I Sec. 2 . . .	Note before Ep.
„ . . .	V Sec. 1 . . .	6.
„ (Khona Shahr) . . .	VI . . .	Ep., 1, 18.
„ . . .	VII . . .	4, 11.
„ . . .	VIII . . .	8.
„ . . .	XII . . .	Ep., 1.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kashgar (Yangi Shahr)	XIII . . .	Ep., 1.
" . . . .	XIV Sec. 1 . . .	Ep., 26.
" . . . .	XIV Sec. 3 . . .	Ep., 3.
" . . . .	4 Sec. 2 . . .	1.
" . . . .	4 B . . . .	6.
" . . . .	I F . . . .	Ep. 8.
" . . . .	I H . . . .	Ep.
" . . . .	I J . . . .	1.
" R. (Kizil Su)	XIV Sec. 2 . . .	8, 9, 10.
" " . . . .	See also Kizil Su.	..
" " . . . .	See also Kashka Su ?	..
Kash Langar . . . .	XII Sec. 3 . . .	1, 2.
Kashlastai . . . .	XII (8) . . . .	14.
Kashmir . . . .	XIV Sec. 1 . . .	4, 8.
Kashmir Jilga . . . .	13 . . . .	12.
Kash Robat . . . .	X Sec. 1 . . . .	1.
Ka-shun-t'ang . . . .	XV Sec. 1 . . .	7.
Kashuti Karaul . . . .	XIV T . . . .	1.
Kataklik . . . .	11 . . . .	6, 9.
Katak-Tash . . . .	XIV J . . . .	1.
Kauruk . . . .	I F . . . .	5 (Note).
Kauruk Bashi . . . .	V (1) . . . .	2.
" . . . .	V (4) . . . .	2.
" Bel Pass . . . .	V (1) . . . .	3.
" " . . . .	V (4) . . . .	3.
" Valley . . . .	V (1) . . . .	2.
" " . . . .	V (4) . . . .	2.
Kau Shan . . . .	XIV Sec. 3 . . .	18.
Kaying Aghzi . . . .	I F . . . .	4.
" Jilga . . . .	I F . . . .	4, 5 (Note B).
Kazak . . . .	XII D . . . .	23.
Kazak Karaul . . . .	6 . . . .	2.
Kazan Kul (Yaman Yar) . . . .	XIII . . . .	2.
Kazarut R. . . .	4 Sec. 2 . . . .	3.



Name	Route.	Stage.
<i>K—contd.</i>		
Kechkan Tarim	XIV P	4.
Keklik	I Sec. 2	6.
Kelpin	I Sec. 2	7 (Note).
"	"	9 (Note).
"	I (7)	4.
"	I (8)	..
"	XII Sec. 1	3.
Keng-keng	XVI A	1.
Keng Koik	XII D	3.
Kere Bazaar	XIV (6)	..
Kerkechki.	4 Sec. 1	2.
Keria	XII Sec. 4	Ep., 5, 6, 26.
"	15 Sec. 2	Ep. 7, 9, 10, 12.
"	XII D.	1.
Keria R.	XII Sec. 4	7.
"	15 Sec. 2.	12.
"	15 H.	1.
"	15 L.	1.
Keriya	Sec Keria	..
Khadalik	XIV (3) (i)	..
Khadiwas Jilqa	XIV Sec. 1	16, 17.
Khafaliang	13	13.
Khaian Aksai	I A	6.
Khai Yailak	I Sec. 3	8.
Khalik (Chalik Mabuse)	I Sec. 3	6.
"	I (12)	Ep.
Khamer Dawan Stream	I Sec. 3	9.
Khanamabi (and Dawan and R.).	XII (8)	12.
Khanambai	Index, page ii	Note.
"	..	2.
Khan Arik (Doshamba Bazaar).	I J	2.
"	I K	1.
"	I K (1), I K (a)	..



Name.	Route.	Stage.
<i>K—contd.</i>		
Khandar . . . . .	I C . . . . .	Ep.
Khan-kul . . . . .	I H . . . . .	Ep.
„ Dawan . . . . .	I H . . . . .	Ep.
„ Pass (Dawan) . . . . .	I G (1) . . . . .	3.
Khan Langar . . . . .	I B. . . . .	Ep., 15.
„ . . . . .	I C . . . . .	20.
„ . . . . .	I D . . . . .	2, 3, 4.
Khanterek (Khurgan) . . . . .	I F . . . . .	Ep., 5 (and Note B.).
Khargalik . . . . .	See Karghalik . . . . .	..
Khargos . . . . .	X . . . . .	2, 3.
Kharmantai . . . . .	XIV Sec. 3 . . . . .	21.
Khazaikvil . . . . .	I E. . . . .	4.
Khargiz Jangal . . . . .	2 . . . . .	2.
Khitai (Johnson) Dawan . . . . .	15 Sec. 1 . . . . .	6.
Khitai Tam . . . . .	14 . . . . .	6.
Kholuk-boi . . . . .	I Sec. 3 . . . . .	5.
Kholuk-su . . . . .	I Sec. 3 . . . . .	5.
Khona Shahr (Kashgar) . . . . .	VI . . . . .	18.
Khotan . . . . .	XII Sec. 3 . . . . .	Ep. 7, 10.
„ . . . . .	XII Sec. 4 . . . . .	Ep.
„ . . . . .	XIV Sec. 1 . . . . .	Ep., 26.
„ . . . . .	15 Sec. 2 . . . . .	Ep., 12.
„ . . . . .	XII A . . . . .	Ep.,
„ . . . . .	XIV B . . . . .	..
„ . . . . .	15 A . . . . .	10.
„ . . . . .	15 D . . . . .	1.
„ . . . . .	15 E . . . . .	10.
„ . . . . .	15 G . . . . .	4.
„ . . . . .	15 H . . . . .	6.
„ . . . . .	XII A . . . . .	6, 13.
Khotan Simbu . . . . .	6 . . . . .	27.
Khotan Tam . . . . .	XIV Sec. 6 . . . . .	Ep.
„ „ . . . . .	XIV T . . . . .	1.
Khoten Bhai Kargill . . . . .	14 . . . . .	7.
„ „ „ . . . . .	I C . . . . .	4.



Name.	Route.	Stage.
<i>K—contd.</i>		
Khunugu . . . .	XII (8) . . . .	1.
Khupulagsse . . . .	13 . . . .	13.
Khushabad . . . .	XIV (3) (i) A . . . .	..
Khushal . . . .	V Sec. 1 . . . .	4.
Kush Kishlak . . . .	V (1) . . . .	2.
" " " " " "	V (4) . . . .	2.
Khurla (Ku-erh-la) . . . .	XIV Sec. 3 . . . .	18, 20.
" " " " " "	XIV (7) . . . .	..
" " " " " "	XIV O, XIV O (1) . . . .	..
" " " " " "	XIV P . . . .	Ep.
Kiakbashi . . . .	4 Sec. 2 . . . .	3.
Kichik . . . .	VI . . . .	17.
Kichik Karaul . . . .	5 . . . .	1
" " " " " "	I G (1) . . . .	4.
Kichik Karokoram . . . .	XIV Sec. 1 . . . .	17.
Kichik Pichan . . . .	I Sec. 2 . . . .	5.
Kichik Sarai . . . .	XII (1) . . . .	3.
Kichik Yallak R. . . .	XIV Sec. 1 . . . .	19.
Kichik Yul Pass . . . .	I C. . . .	11.
Kichit . . . .	I M. . . .	2.
Kighilik . . . .	XII D . . . .	6.
Kildyrma La . . . .	11 . . . .	2.
Kilian (Bazar) . . . .	XIV Sec. 1 . . . .	Ep.
" " " " " "	14 . . . .	2.
" " " " " "	XIV D . . . .	3.
" (Bridge) . . . .	XIV D . . . .	3.
" Dara . . . .	14 . . . .	8.
" Defile . . . .	14 . . . .	9.
Kilian Kurghan . . . .	XIV Sec. 1 . . . .	16.
Kilian Pass . . . .	13 (1) . . . .	..
" " " " " "	14 . . . .	Ep., 6, 7.
" " " " " "	I C . . . .	1.
Kilian R. . . .	XIV Sec. 1 . . . .	22, 23.
" " " " " "	14 . . . .	2, 4.
" " " " " "	XIV F. . . .	2.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kilik Pass . . .	13 (1) . . .	..
" " . . .	I Sec. 1 . . .	Ep.
" " . . .	I (1) . . .	2.
" Stream . . .	I (1) . . .	1.
Kinkol . . .	I E . . .	5.
" Valley . . .	I Sec. 1 . . .	10, 11.
" " . . .	I F . . .	2 (Note A).
" " . . .	I G (1) . . .	4.
Kir . . .	7 . . .	1.
Kirban-beg-Akin . . .	XIV F . . .	2.
Kirchin Jilga . . .	2 . . .	1.
Kirghiz Jangal . . .	13 . . .	12.
Kirghiz-at Pass . . .	8 . . .	4.
Kirigut-Oghil . . .	XII A . . .	4.
Kityn R. . . .	XI . . .	2, 3.
Kivaz . . .	XIV Sec. 1 . . .	Ep., 20.
Kizil (Ho-tzu) . . .	XIV Sec. 3 . . .	8.
" . . .	8 . . .	2.
" . . .	I E . . .	Ep.
" . . .	See also Kizil Bazar . . .	..
Kizil Art Su . . .	4 . . .	Ep.
" " " . . .	4 Sec. 2 . . .	5.
Kizil Bai . . .	I K . . .	1.
Kizil-Bash-langar . . .	XIV D . . .	1.
Kizil Bazar . . .	I G . . .	..
" " . . .	XII Sec. 1 . . .	3.
" " . . .	I H . . .	Ep.
Kizil Billa Jilga . . .	V Sec. 2 . . .	3.
Kizil Bulak . . .	I Sec. 3 . . .	4.
" " . . .	I (11) . . .	3.
" " . . .	I N . . .	1, 6.
Kizil-chap. . . .	XII (1) . . .	8.
Kizil Dawan . . .	V (1) . . .	3.
" " . . .	V (4) . . .	3.
Kizil Dawan . . .	VI . . .	15.
Kizil Dawan . . .	I E . . .	4.



Name.	Route.	Stage.
<i>K—contd</i>		
Kizil Dawan . . .	I H . . .	Ep.
" " . . .	15 D . . .	1.
Kizil Eshma . . .	I Sec. 2 . . .	7.
Kizil Jilga . . .	V (1) . . .	2.
" " . . .	V (4) . . .	2.
Kizil Jong . . .	XII D . . .	22.
Kizil Kia Darreh . . .	I D . . .	7.
Kizil Kum . . .	XII (3) . . .	8.
Kizil Kurghan . . .	VI . . .	5.
" " . . .	VII . . .	7, 8.
Kizillik-Dong . . .	XII (3) . . .	6.
Kizil R. . . .	XII Sec. 1 . . .	4.
" " . . .	I E . . .	3.
	See also Kizil Su.	
Kizil Robat . . .	III . . .	2.
Kizil Su . . .	VI . . .	11, 12, 13, 18.
" " . . .	VI B . . .	..
" " . . .	VII . . .	11.
" " . . .	IX . . .	1.
" " (Kashgar R.) . . .	XIII . . .	3, 5, 6, 7, 9, 10.
" " . . .	4 B . . .	6.
" " . . .	XIV L . . .	2.
" " . . .	See also Kashgar Su.	..
" " . . .	See also Kizil R. . .	..
Kizil Tagh . . .	XII Sec. 1 . . .	4.
" " . . .	XIV Sec. 1 . . .	12.
" " . . .	I E . . .	2.
" " . . .	I G (1) . . .	Ep., 2.
Kizil Tus . . .	10 . . .	8.
Kizil Ui R. . . .	VI . . .	15.
Kizil Yar . . .	I H . . .	Ep.
" " Dawan . . .	I H . . .	9.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kizilyat . . .	XIV Sec. 1 . . .	9.
Kizmak Aghzi . . .	I F . . .	2, 3.
„ Pass . . .	I F . . .	2 (Note A).
Kobdo . . .	XI . . .	16.
Kobuga Dawan . . .	15 A . . .	6.
Kochalik Jilga . . .	XIV J . . .	2.
„ „ . . .	XIV K . . .	1.
„ Sai . . .	XIV J . . .	2.
Kochgar Oghil . . .	XII C . . .	Ep.
Kochka Oghil . . .	XII D . . .	4.
Kochkar-bashi . . .	XIV J . . .	2.
Kodak Aral . . .	XII A . . .	13.
Ko-Doba . . .	I M . . .	2.
Kogart Pass . . .	VI A (1) . . .	..
Kojesh Kukur . . .	XII (8) . . .	8.
Kokala Dawan . . .	I N . . .	3.
Kokan-Ishak . . .	I Sec. 2 . . .	9.
Kok-Bash . . .	XIV (2) . . .	..
Kok-boinak Jilga . . .	XIV J . . .	2.
Kok-Bulak-Dusht . . .	I Sec. 1 . . .	7.
Kok-Bulak-Jilga . . .	I Sec. 1 . . .	7.
Kok-Jigda . . .	XII (1) . . .	1.
„ „ . . .	XII D . . .	4.
Koke Jigdar Oghil . . .	XII Sec. 4 . . .	15.
Kok Moinak . . .	I Sec. 2 . . .	9.
„ „ Pass . . .	I Sec. 1 . . .	8.
	See also Kuk Mui Naq Pass.	
Kok Robat . . .	I D . . .	1.
„ „ . . .	I G (1) . . .	1.
„ „ Langar . . .	XII Sec. 1 . . .	4, 5.
Koksai . . .	4 Sec. 2 . . .	5 (Note).
„ Pass . . .	4 . . .	..
Kokshal R. (Taushkan) . . .	I Sec. 2 . . .	8.
„ „ . . .	I (6) . . .	3.
„ „ . . .	I (10) . . .	1.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kok Su . . .	6 . . .	5, 6, 7, 9, 12.
„ „ (Bridge) . . .	6 . . .	5.
„ „ . . .	8 . . .	4, 5.
Koktan Range . . .	VI A (1) . . .	..
Kok-tar . . .	I L . . .	1.
Kok Terek R. . .	6 . . .	4.
Kokucha . . .	XII D . . .	25.
Kok Yar . . .	XII D . . .	6.
Kok Yut Jilga . . .	15 B . . .	2.
Kol-Kol . . .	XII D . . .	22.
Kol Maha. . .	I (7) . . .	6.
Komitek . . .	I Sec. 1 . . .	8.
Kona-Bai-agn . . .	XIV F . . .	1.
Konche-Bubak . . .	XII (1) . . .	14.
„ Dalrya . . .	XIV P . . .	7.
„ R. (Darya ?) . . .	XIV Sec. 3 . . .	21.
„ R. . .	XIV (7) . . .	..
Kongani . . .	XIV Sec. 1 . . .	27.
Kontigmas . . .	4 Sec. 2 . . .	2.
Koom (Kum) Bulak . . .	XIV Sec. 1. . .	12.
Korika . . .	XII D . . .	25.
Koruni-bogus R. . .	I (8) . . .	2.
„ . . .	I (9) . . .	..
Korse-bai-daryasi . . .	I N . . .	6.
Korukik Ikim . . .	XII A . . .	14.
Koshbulak . . .	XII (8) . . .	4.
Koshe Langza . . .	XII Sec. 4. . .	37.
Kosh-Gumba . . .	XII Sec. 1. . .	3.
Kosh Kuduk . . .	XII Sec. 4 . . .	43.
Koshlash Langar . . .	XII A . . .	Ep., 5.
Koshobide-Mazar . . .	15 L . . .	1.
Koshtam . . .	XIV O . . .	..
Koshtagh . . .	XIV Sec. 1 . . .	22.
„ . . .	XIV F . . .	1.
Koshta-Yoi-Dawan . . .	I N . . .	3.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kosh Uki . . . . .	VI . . . . .	13, 14.
Kosk-Dolu-Kongtai-Karaul . . . . .	I (8) . . . . .	4.
Kotalik . . . . .	15 B . . . . .	2.
Kotaz . . . . .	XIV Sec. 1. . . . .	14.
Koura . . . . .	I Sec. 3 . . . . .	12, 13.
Kou-ssu . . . . .	XV Sec. I . . . . .	1.
Kuchar (K'u-Ch'e-Chou) . . . . .	XIV Sec. 3 . . . . .	9, 10.
Kuchar . . . . .	XIV (6) . . . . .	..
" . . . . .	6 . . . . .	12 [Note (a)].
" . . . . .	8 . . . . .	Ep.
" . . . . .	XII D . . . . .	24, 25.
" . . . . .	XIV N . . . . .	Ep.
" R. . . . .	XIV (6) . . . . .	..
Kuche . . . . .	I (10) . . . . .	1.
K'u-ch'e-Chou . . . . .	See Kuchar . . . . .	..
Kucheng . . . . .	XIV Sec. 5 . . . . .	..
" . . . . .	XIV Sec. 6 . . . . .	9, 14, 15.
" . . . . .	XV Sec. 1. . . . .	..
Ku-ch'eng . . . . .	See Kucheng . . . . .	..
Kuchkar Ata . . . . .	I Sec. I . . . . .	9.
Kuduk . . . . .	I Sec. 2 . . . . .	2.
" . . . . .	XII Sec. 1 . . . . .	3.
Kuei-Tun-T'ai . . . . .	See Kweitung . . . . .	..
Kuen Lun . . . . .	XII Sec. 3 . . . . .	Ep.
" . . . . .	XIV Sec. 6 . . . . .	3.
" . . . . .	15 Sec. 2 . . . . .	Ep., 9, 12.
" . . . . .	15 H. . . . .	Ep., 3.
" . . . . .	15 J . . . . .	1.
Ku-erh-la . . . . .	See Khurla . . . . .	..
Ku-erh-pi-la-T'ai . . . . .	XI . . . . .	8.
Ku-erh-T'u-T'ai . . . . .	I Sec. 4 . . . . .	11.
Kugart Aghzi . . . . .	13 . . . . .	11.
Kugiar . . . . .	XIV Sec. 1. . . . .	Ep., 13.
" . . . . .	13 . . . . .	3.
" . . . . .	14 . . . . .	Ep.
" . . . . .	I C . . . . .	11, 12, 13.
" (Pass) . . . . .	" . . . . .	..



Name.	Route.	Stage.
<i>K—contd.</i>		
Kugiar . . . . .	I E . . . . .	3.
Kuk Mui Naq Pass . . . . .	V Sec. I . . . . .	1.
	See also Kok Moirak Pass.	..
Kuksin R. . . . .	2 . . . . .	2.
Kukturuk . . . . .	I (1) . . . . .	2.
" . . . . .	I (2) . . . . .	Ep.
Kul . . . . .	2 . . . . .	6.
Kulan Jilga . . . . .	3 (1) . . . . .	..
Kulanuldi . . . . .	2 . . . . .	3.
" . . . . .	13 . . . . .	9 (Note), 11.
" . . . . .	14 . . . . .	Ep.
Kulan Urgi Valley . . . . .	I B . . . . .	Ep., 5, 6, 8.
Kulan-Urzi R. . . . .	2 . . . . .	6 (Note).
Kula Rishek . . . . .	15 F. . . . .	1.
Kuldja . . . . .	I Sec. 3 . . . . .	Ep.
" . . . . .	I (13) . . . . .	Ep.
" . . . . .	I Sec. 3 . . . . .	16.
" . . . . .	I Sec. 4. . . . .	..
" . . . . .	IX . . . . .	Ep.
" . . . . .	X . . . . .	Ep., 4.
" . . . . .	6 . . . . .	Ep., 12 [Note (b)].
" . . . . .	7 . . . . .	Ep., 3.
" (Ili) . . . . .	10 . . . . .	Ep.
" . . . . .	XIV N. . . . .	Ep.
Kum . . . . .	See also Koom . . . . .	..
Kumarabat . . . . .	XII D . . . . .	6.
Kum-arik-darya . . . . .	I N . . . . .	2.
Kumarik Valley . . . . .	I (10) . . . . .	2.
Kumbagh . . . . .	I Sec. 2 . . . . .	1.
Kumbagh . . . . .	XII Sec. 4 . . . . .	5.
Kumbayan Chap . . . . .	XII (I) . . . . .	11.
Kum Chamak . . . . .	XII A . . . . .	13.
Kum Koilajan . . . . .	XIV K . . . . .	1.



Name.	Route.	Stage.
<i>K—contd.</i>		
Kum Koilajan Jilga . . . . .	XIV J . . . . .	2.
Kum Kudak . . . . .	XII Sec. 4. . . . .	40.
Kum Kul . . . . .	Index, page ii . . . . .	Note.
Kumshuluk Jilga . . . . .	XIV J . . . . .	2.
Kum Singer . . . . .	I Sec. 2 . . . . .	2.
Kumush . . . . .	XIV Sec. 3 . . . . .	Ep., 26, 27.
Kum Yari. . . . .	I (7) . . . . .	4.
Kunchekho . . . . .	XII (8) . . . . .	11.
Kungai Koksū (R.) . . . . .	XIV Sec. 3 . . . . .	10.
" " . . . . .	8 . . . . .	1.
Kunges . . . . .	7 . . . . .	Ep.
Kungirat . . . . .	I N . . . . .	1.
Kungur . . . . .	I F . . . . .	3.
Kunjerab Pass . . . . .	1 . . . . .	Ep.
" R. . . . .	1 . . . . .	Ep.
" " . . . . .	I A (1) . . . . .	1, 2.
Kunluk . . . . .	XV Sec. 2 . . . . .	6.
Kunya Shah . . . . .	See Kurghan . . . . .	..
Kuo-mu-ti . . . . .	XIV Sec. 5 . . . . .	Ep., 6.
Kupruk Bulak . . . . .	I Sec. 2 . . . . .	4.
Kura . . . . .	X . . . . .	4.
Kuram Jilga . . . . .	I A . . . . .	10.
Kuramluk Jilga . . . . .	15 H . . . . .	5.
Kurak Bulak . . . . .	XIV R . . . . .	2.
Kurat Dawan . . . . .	15 A . . . . .	6.
Kurbu (Ili Su) Pass . . . . .	I A . . . . .	Ep., 5, 8.
" " . . . . .	I B . . . . .	Ep.
Kurchien . . . . .	XIV Sec. 3 . . . . .	29.
Kurdia Pass and R. . . . .	6 . . . . .	6, 7, 8.
Kurghan (Kunya Shah) . . . . .	I Sec. 3 . . . . .	5.
" . . . . .	XIV N . . . . .	Ep.
" . . . . .	XIV P. . . . .	8.
Kurghan Kul . . . . .	V Sec. 1 . . . . .	3.
Kurghashim Khana . . . . .	VI . . . . .	14.
Kurghoiluk-jilga . . . . .	I N . . . . .	6.
Kurla (Bazar) . . . . .	See Khurla . . . . .	..



Name.	Route.	Stage.
<i>K—concl'd.</i>		
Kurlung Turung . . .	XIV Sec. 1 . . .	19.
Kurte . . . . .	10 . . . . .	Ep., 12.
Kurughut Tagh . . .	XIV Sec. 3 . . .	24
Kuruk-Ishma . . . .	XIV Sec. 3 . . .	18.
Kuruk Karaul . . . .	See Kuruk Kur-ghan.	..
Kuruk Kurghan . . .	V . . . . .	Ep.
" " . . . . .	V Sec. 1 . . . .	2, 3.
" " . . . . .	V (3) . . . . .	3.
Kuruk Tagh . . . . .	XII Sec. 4 . . .	41.
Kuruk Tagh . . . . .	XIV Sec. 3 . . .	18, 21.
Kuruk Uzum . . . . .	I (7) . . . . .	6.
Kurup R. . . . .	15 Sec. 2. . . .	10.
Kururo . . . . .	I Sec. 2 . . . .	4.
Kurwaz-Choki . . . .	XV Sec. 2 . . . .	4.
Kushtam . . . . .	XIV O. . . . .	Ep.
Kushtimi (Hei-mi-tzu-tien)	XIV Sec. 3 . . .	5.
K'u-shui . . . . .	XIV Sec. 6. . . .	Ep.
Kusnech . . . . .	I C . . . . .	6.
Kustai Valley . . . .	6 . . . . .	8.
Kutak-Mazar . . . .	15 B . . . . .	2.
Kutdur-i-dasht . . .	2 . . . . .	15.
Kutlish . . . . .	15 L . . . . .	1.
Kuturmah . . . . .	V Sec. 1 . . . .	3.
Kutuz Langar . . . .	15 H . . . . .	5.
Kweitung . . . . .	I Sec. 4 . . . .	15.
" . . . . .	XI . . . . .	7, 8
Kuyil Dawan . . . .	XIV C . . . . .	1.
Kuzlek-Mahalla . . .	XIV P . . . . .	4.
<i>L</i>		
Lachin R. . . . .	XII Sec. 4 . . .	35.
Laikhun . . . . .	XIV Sec. I . . .	4.
Lailik . . . . .	XIV Sec. 2 . . .	2.
" . . . . .	XIV (3) . . . .	..



Name.	Route.	Stage.
<i>L—contd.</i>		
Lailik . . . . .	I J . . . . .	5.
„ Ortang . . . . .	XIV Sec. 2 . . . . .	2.
Lakshkar Satma . . . . .	XII Sec. 4 . . . . .	25.
„ „ . . . . .	XII (4) . . . . .	..
Lalma . . . . .	XIV (4) . . . . .	1.
Lamlung Mazar . . . . .	XIV C . . . . .	8.
Lamus . . . . .	XIV J . . . . .	2.
„ . . . . .	XIV K . . . . .	..
Langar . . . . .	VI . . . . .	3.
Langar . . . . .	XIV Sec. 3 . . . . .	7.
Langar . . . . .	2 . . . . .	16.
Langar . . . . .	8 . . . . .	1.
Langar . . . . .	4 B . . . . .	6.
Langar (Qurug ?) . . . . .	I C . . . . .	18, 19, 20.
Langar . . . . .	I C . . . . .	21, 22.
Langar . . . . .	I J . . . . .	4.
Langar Awat . . . . .	XIV Sec. 2 . . . . .	3.
Langar-i-Kiki . . . . .	II . . . . .	..
Langartam . . . . .	See Tam Karaul . . . . .	..
Langhru . . . . .	15 A . . . . .	9.
Langte Fort . . . . .	V Sec. 1 . . . . .	1.
Langte Kurghan . . . . .	V (3) . . . . .	5.
Lan Ko . . . . .	XIV Sec. 3 . . . . .	7.
Larcha Ya Tuba . . . . .	13 (1). . . . .	..
Leh . . . . .	XIV Sec. 1 . . . . .	Ep.
„ . . . . .	XIV (1) . . . . .	..
„ . . . . .	11 . . . . .	1.
„ . . . . .	13. . . . .	Ep.
„ . . . . .	14 . . . . .	10 (Note).
Lempa-Yailak . . . . .	XII D . . . . .	3
Liao-tun-tzu . . . . .	XIV Sec. 6 . . . . .	5.
Lighten Lake . . . . .	15 Sec. 1 . . . . .	6.
Lingzi-Thang . . . . .	XIV Sec. 1 . . . . .	Ep.
„ „ . . . . .	14 . . . . .	10 (Note).
Li-shu-tien . . . . .	XIV Sec. 5. . . . .	2.



Name.	Route.	Stage.
<i>L—conold.</i>		
Lob Bazar . . .	XII Sec. 4 . . .	1.
" . . .	XII (6) . . .	Ep.
" . . .	XIV P. . .	10.
" . . .	15 H. . .	4 (Note).
" Desert . . .	XII Sec. 4 . . .	Ep.
" Nor. . . .	XII (6) . . .	Ep.
Lokchum . . .	XVI . . .	1 (Note).
" . . .	XIV P. . .	7.
" . . .	XIV R. . .	16.
Lok-oghil . . .	15 A . . .	8.
" " . . .	15 E . . .	10.
Loongpa . . .	13 . . .	13.
Lop . . .	See Lob . . .	..
Lou-lan . . .	XIV P . . .	7.
" . . .	XIV P (1) . . .	..
Luk Chikte . . .	XII D . . .	20.
Lovoza (Lowaza) . . .	XII Sec. 4 . . .	36.
Lowaza . . .	See Lovoza . . .	..
Lukchun . . .	See Lokchun . . .	..
Lung Kor . . .	XIII . . .	5.
Lungri . . .	15 Sec. 2 . . .	9.
Lun-t'ai-Hsien . . .	See Bugur . . .	..
Lu T'sao Kou . . .	10 . . .	2.
<i>M</i>		
Majan . . .	I N . . .	1.
Makkai . . .	Index, page ii . . .	Note.
Malghun . . .	15 L . . .	6.
Malishah . . .	XIV Sec. 1 . . .	13.
Mamuk . . .	I C . . .	16.
Manass (Sui-ning Ch'eng) . . .	XI . . .	4.
Mandarlik Aghil . . .	XII A . . .	10.
Mangan . . .	See Tuguzak . . .	..
Maralbashi . . .	I Sec. 2 . . .	Note before Ep.



Name.	Route.	Stage.
<i>M—contd.</i>		
Maralbashi . . .	VI . . .	Ep.
" . . .	XII . . .	6, 7, 9, 10.
" . . .	XIV Sec. 2 . . .	7, 9 (Note).
" . . .	XIV (3) . . .	..
" . . .	XIV (4) . . .	1, 2.
" . . .	I J . . .	5.
" . . .	XIV L . . .	..
" . . .	XIV O . . .	Ep.
Maralbuk . . .	V Sec. 1 . . .	2.
Mariong Pass . . .	I A . . .	14.
Mar Kan Su . . .	4 Sec. 2 . . .	5.
" " " . . .	4 B . . .	1.
" " " . . .	4 C . . .	Ep.
" " " . . .	4 D . . .	Note.
Masdan . . .	I N . . .	6.
Matan . . .	XII A . . .	15.
Mat-chap . . .	15 L . . .	8.
Maudalik-sai . . .	XII (1) . . .	11.
Mazar Aldi . . .	I N . . .	6.
Mazar Sultan . . .	I A (1) . . .	1.
Mazar Tagh . . .	XIV Sec. 2 . . .	8.
Mazar Togh . . .	XII A . . .	7.
Mazar Urzi . . .	I C . . .	16.
Marsalang . . .	11 . . .	1.
Mazar . . .	7 . . .	3.
Mazar Khoja . . .	13 . . .	6.
" " . . .	13 (1) . . .	..
Menut . . .	XIV Sec. 2 . . .	3.
" . . .	XIV L . . .	1.
Murdek Kol . . .	XIV P (1) . . .	..
Merket . . .	XIV Sec. 2 . . .	2.
" . . .	XIV (3) . . .	Ep.
" . . .	XIV (3) (i) . . .	..
" . . .	XIV (4) . . .	1.
Merki Glen . . .	I Sec. 1 . . .	8.
" Nullah . . .	I F . . .	2.



Name.	Route.	Stage.
<i>M---contd.</i>		
Mian R.	XII Sec. 4	32.
Mian Tarim	XII Sec. 4	31.
"	XII (7)	..
Mingtege Pass	4 B	2.
Mintaka Aksai	I Sec. 1	Ep., 1, 2.
"	II	..
Min Yol	See Myn U Dal	..
Mirgal	I E	5.
Misali-Oghil	XII D	6.
Mirawit	XII A	3.
"	XII C	Ep.
Mit R.	XII (1)	13.
Mohammad Khoja Gorge	2	6.
Moghal Darya	I J	3.
Moghul Erc	I F	6.
Mointai R.	6	3.
Moji	XIV G.	1.
Mokula	XII Sec. 3	4.
Molcha (and R.)	XII (1)	11.
Mongolia	XI	16.
"	XV Sec. 1	Ep.
Moshe	XIV G	1.
"	XIV H	Ep.
Mozar	XIV Sec. 3	16.
Mozlugaz	15 A	6.
Muji	XII Sec. 3	4.
Mujuk Toghrak	XIV P	6.
Muk	4	Ep.
"	4 Sec. 2	5.
"	4 (2)	..
"	4 B	1, 2.
"	4 C	..
Mui-lei Ho	XIV Sec. 6	13.
Mu-lei-t'ang	XIV Sec. 6	12.
"	XV Sec. 1	3.



Name.	Route.	Stage.
<i>M—concl'd.</i>		
Mullah-Gada . . .	XII D . . .	6.
Muna-Bulak-Sai . . .	XII (3) . . .	1.
Murbu . . .	XIV Sec. 1 . . .	8.
Murghabi . . .	See Pamirski Post . . .	..
Murgisthang glacier . . .	XIV Sec. 1 . . .	6.
Murgo . . .	XIV Sec. 1 . . .	Ep., 7, 9.
" . . .	II . . .	10.
" R. . .	II . . .	Ep., 10.
Murkushi . . .	I Sec. 1 . . .	Ep., 1.
Mustagh (ii) . . .	2 . . .	8.
Mustagh Mt. . . .	4 Sec. 1 . . .	1.
Mustagh Pass . . .	2 . . .	9.
" " . . .	3 . . .	Ep.
Muzaman Mayar . . .	XII A . . .	16.
Muzarat Pass . . .	II . . .	..
Muzart Pass . . .	I Sec. 3 . . .	Ep., 10.
" " . . .	IX . . .	Ep.
" " . . .	XIV N . . .	Ep.
" (Jandarar) Ridge . . .	XIV Sec. 1 . . .	18.
" R. . .	I Sec. 3 . . .	Ep., 4, 5, 7.
" " . . .	I (10) . . .	5.
" " . . .	XIV Sec. 3 . . .	5.
" " . . .	XII D . . .	24.
Muz-bulak . . .	XII (8) . . .	13.
Muz Glacier . . .	I Sec. 3 . . .	5, 7.
" " . . .	XIV N . . .	Ep.
" R. . .	I Sec. 3 . . .	7.
" Valley . . .	I Sec. 3 . . .	5.
Myn U Dal . . .	VI . . .	16.
N		
Naiza Tash . . .	IV . . .	..
Namlung Mazar . . .	I C . . .	6.
Nanhu . . .	XII (8) . . .	16.



Name.	Route.	Stage.
N—concl'd.		
Nangi Abad . . .	XII D . . .	24.
Narat . . .	6 . . .	14.
„ Pass . . .	6 . . .	12 [Note (b)].
Narin . . .	XIV T . . .	1.
Narim Kur . . .	XV Sec. 2 . . .	3.
Naryn . . .	VII . . .	Ep.
Naryan-Kol . . .	I Sec. 3 . . .	10.
Nawachang . . .	XII (8) . . .	11.
Nazar Beg Kurghan . . .	13 . . .	12.
Nia . . .	XII Sec. 4 . . .	Ep., 10.
„ . . .	XII (1) . . .	..
„ . . .	15 Sec. 2 . . .	12.
Nine Passes . . .	See Tokus Dawan . . .	..
Nissa . . .	15 E. . .	4.
Nubra R. . .	XIV Sec. I . . .	4, 5.
„ Valley . . .	XIV Sec. I . . .	16, 19.
„ „ . . .	11 . . .	Ep.
Nura . . .	15 H . . .	2.
„ R. . .	15 H . . .	2.
O		
Ochak Bulak . . .	I (7) . . .	1.
Ochik Jilga . . .	15 H . . .	5.
Ochke-Ulus-oghil . . .	XII D . . .	5.
Octang-Yar . . .	I N . . .	3.
Oghri Baldir R. . .	I C . . .	17.
„ „ . . .	I D . . .	6, 7.
Oibagh . . .	XIV F . . .	1.
Oighareq . . .	I C . . .	20.
Oigu-tan . . .	XIV Sec. 2 . . .	9.
Oi-Kacha . . .	I C . . .	1.
Oi-Kudag . . .	I J . . .	4.
Oinak Valley . . .	V (2) . . .	2.
Oitagh . . .	V (a) . . .	..
„ Aghzi . . .	V Sec. 1 . . .	4.
„ „ . . .	V (I) . . .	1.



Name.	Route.	Stage.
O—concl'd.		
Oitagh Aghzi . . .	V (4) . . .	1.
„ Jilga . . .	V . . .	Ep.
„ „ . . .	V (2) . . .	Ep., 1.
Oi-toghrak . . .	XIV Sec. 1 . . .	23.
„ „ . . .	XIV D . . .	5.
Oi Toghrak . . .	See Ui Tughrak . . .	..
Oital . . .	VI . . .	12 (Note).
„ . . .	VI A (1) . . .	..
Oi Tattir . . .	I (10) . . .	2.
Oku-Mazar . . .	XIV Sec. 2 . . .	9.
Olonbulak . . .	XI . . .	10.
Omhlak Aral . . .	XII A . . .	13.
Ongan Mazar . . .	I (7) . . .	6.
Opal . . .	V A, VI B . . .	..
„ . . .	4 B . . .	5.
Oprang . . .	2 . . .	8.
„ . . .	3 (1) . . .	..
„ . . .	I A . . .	8, 10.
„ . . .	I A (1) . . .	4.
„ . . .	I B . . .	Ep.
„ Pass . . .	I A . . .	8, 9.
„ „ . . .	I A (1) . . .	Ep., 3.
„ R. . .	2 . . .	9, 12.
Orkash-bulak . . .	XIV R . . .	16.
Oroche . . .	I (7) . . .	7.
Ortang . . .	XIV F . . .	2.
Oschleh . . .	I C . . .	13.
Osh . . .	VI . . .	2, 10 (Note).
Osmari Tagh Tigharmate . . .	I M . . .	1.
Ostang Dawan . . .	I C. . .	9.
Ostong boi . . .	XIV N . . .	Ep.
Otrokir (Langar) . . .	15 H . . .	4, 5.
Owras Langor . . .	XII Sec. 4 . . .	9.
Oyung . . .	I B . . .	14.
„ . . .	I C. . .	14.
Oyurma Pass . . .	4 Sec. 2 . . .	2.



Name.	Route.	Stage.
P		
Pacha Saighan (Shiao-Tsao-Tsao-Hu).	XIV Sec. 4	1.
" " "	XVI A	Ep.
Pa-Cheng-tzu.	XIV Sec. 4	4.
Padshahim-Mazar	XII D	3.
Pailu	XII D	25.
Paita Tushte	XII D	22.
Pai-Yang-Ho	XVI A	3.
" " "	XIV Sec. 4	2.
" " " Pass	XIV Sec. 4	2.
Paghr-Saghran	XIV Sec. 2	Ep.
Pai-cheng Hsien	See Bai	..
Paik (Payik) (Bayik)	I Sec. 1	3, 4.
"	III	1.
Pailu	XII Sec. 4	26.
Pakhapu	2	5.
Paklau Khojain	I F	6.
Pakhta-Bash-Oghil	XII D	3.
Pakhtalik Jilga	15 H	4.
Palo	XIV Sec. 1	10.
Pamir, Alichur	III	Ep.
Pamirs, Russian	III, IV, V, 4	..
Pamir Tagdumbash	I Sec. 1	3.
" "	I A	Ep., 4, 7 (Note), 8
Pamir Post	See Pamirski Post.	..
Pamirski Post (Murghabi)	IV, IV (1)	..
" "	V	Ep.
" "	V Sec. 2	1.
Pang Tangsa	XIV Sec. 1	6.
Panimir	XIV Sec. 1	4.
Panja	XII Sec. 4	38
Pan-Oghil	15 E.	5.
Partash	I B	Ep., 5.
Pas	XII D	24.



Name.	Route.	Stage.
<i>P—contd.</i>		
Paster Dawan . . . .	VII (1) . . . .	..
Pasu . . . . .	2 . . . . .	18.
Patal Oghil . . . . .	XII D . . . . .	5.
Patmalik . . . . .	I Sec. 2 . . . . .	4.
Patma Olang . . . . .	XII Sec. 4 . . . . .	23.
Payik . . . . .	See Paik . . . . .	..
Peking . . . . .	XIII . . . . .	Ep.
Peres . . . . .	XII D . . . . .	22.
" . . . . .	XIV O . . . . .	Ep.
Perse . . . . .	XIV O . . . . .	..
Phurzin-i-Gasht . . . . .	2 . . . . .	14.
Pialma . . . . .	XII Sec. 3 . . . . .	Ep., 6.
" . . . . .	XIV J . . . . .	3.
Pichan . . . . .	I Sec. 2 . . . . .	5.
" . . . . .	XVI . . . . .	1 (Note).
" . . . . .	XIV Sec. 6 . . . . .	6.
Pichanliq . . . . .	See Egghi Zarak Kurghan.	..
Pilal . . . . .	V (2) . . . . .	Ep., 2.
Pila-ta-Kash (Gash) . . . . .	XIV Sec. 1 . . . . .	16.
" R. . . . .	XIV Sec. 1 . . . . .	16.
Pisha . . . . .	15 F . . . . .	1.
" . . . . .	15 F (1), 15 G . . . . .	..
" Jilga . . . . .	15 F (1) . . . . .	1.
Pishkia . . . . .	15 L . . . . .	4.
" Sai . . . . .	15 L . . . . .	4.
Pishna Valley . . . . .	XIV Sec. 1 . . . . .	23.
Pobrang . . . . .	15 Sec. 2 . . . . .	6.
Poenak . . . . .	I B . . . . .	Ep., 6.
Pokkalilik (Surkho) . . . . .	I F . . . . .	7.
" Stream . . . . .	I (10) . . . . .	3.
Polur . . . . .	Index, page ii . . . . .	Note.
" . . . . .	15 Sec. 2 . . . . .	Ep., 7, 8, 9, 12.
" . . . . .	15 J, 15 L . . . . .	..
" R. . . . .	15 J . . . . .	1.
" " . . . . .	15 L . . . . .	1.



Name.	Route.	Stage.
<i>P—concl'd.</i>		
Portash . . . .	15 Sec. 1 . . . .	..
Posgam . . . .	XIV Sec. 1 . . . .	26.
Pu-Erh-ka-chi-T'ai . . . .	I Sec. 4 . . . .	13.
Pujiya . . . .	15 A. . . .	9 (Note).
" . . . .	15 C, 15 D . . . .	..
Pung Ch'ang Kou . . . .	See Kang . . . .	..
Pusha . . . .	15 A . . . .	3.
Pusha jilga . . . .	15 A . . . .	3.
Pusha Yailak . . . .	15 A . . . .	2.
Pushki Langar . . . .	XIV J . . . .	1.
" R. . . .	XIV C . . . .	3.
" " . . . .	XIV J . . . .	1.
" " . . . .	XIV K . . . .	1.
<i>Q</i>		
Qaral Jash . . . .	I D . . . .	1.
Qizil Qia . . . .	I D . . . .	7.
Qizil Qia Taun . . . .	I D . . . .	7.
Qizil Qur Valley . . . .	I C . . . .	17.
Qumereq . . . .	See Burkhitai . . . .	..
Quotch Kor nullah . . . .	I B . . . .	4.
Quaraliq . . . .	I C . . . .	20.
Qurug ? . . . .	See Langar . . . .	..
Quruk Langar . . . .	I C . . . .	20.
Qurumliq . . . .	I C . . . .	19.
Qushrab . . . .	I D . . . .	6.
Qushqarbai Bui . . . .	I C . . . .	23.
Quyun Tala . . . .	4 Sec. 1 . . . .	4.
Quzaqchi . . . .	V Sec. 1 . . . .	5.
<i>R</i>		
Ranbirpura . . . .	11 . . . .	Ep., 1.
Rang Kul . . . .	V . . . .	Ep.
" " . . . .	V Sec. 2 . . . .	2, 3.



Name.	Route.	Stage.
<i>R—concl'd.</i>		
Rang Kul . . . . .	V (3) . . . . .	5.
" " . . . . .	5 . . . . .	8.
" " . . . . .	I G (1) . . . . .	4.
Raskam . . . . .	2 . . . . .	2.
" . . . . .	13 . . . . .	13.
" . . . . .	14 . . . . .	Ep.
Raskum . . . . .	I D . . . . .	5.
Roong La . . . . .	15 Sec. 2 . . . . .	5.
" nullah . . . . .	XIV Sec. 1 . . . . .	8.
<i>S</i>		
Saarmin Ula Mts. . . . .	6 . . . . .	18.
Sa-Chow. . . . .	See Tun-Huang . . . . .	..
Sachok . . . . .	XIV (4) . . . . .	1.
Safar Bai . . . . .	I Sec. 2 . . . . .	9 (Note).
Sagan . . . . .	XIV F. . . . .	2.
Saghan Tokka . . . . .	6 . . . . .	5.
Saghizilik Yailak . . . . .	XII D. . . . .	1.
Saghi-Kanart . . . . .	I (8) . . . . .	3.
Sai-arik . . . . .	XIV Sec. 2 . . . . .	15.
Sai Bagh . . . . .	15 D . . . . .	1.
Saigan . . . . .	I (7) . . . . .	3.
Saikichik . . . . .	XIV (3) (i) A . . . . .	..
Sai Langar . . . . .	I D . . . . .	1.
Sairam (Sali-mu) . . . . .	XIV Sec. 3 . . . . .	7.
Sairam-Kanchigal . . . . .	I (8) . . . . .	1.
" Mazar . . . . .	I (8) . . . . .	1.
Saitugurman . . . . .	I D . . . . .	3.
Sake Jilga . . . . .	15 H . . . . .	5.
Sakti . . . . .	11 . . . . .	2.
Sali-mu . . . . .	See Sairam . . . . .	..
Salkauji . . . . .	XII (1) . . . . .	14.
" . . . . .	XII (2) . . . . .	..
Saman Jilga . . . . .	I F . . . . .	5, 6.
Samsak-darya . . . . .	XII D . . . . .	21, 22.



Name.	Route.	Stage.
<i>S—contd.</i>		
Sandal nullah . . . .	I B . . . .	9, 10.
„ Pass . . . .	I B . . . .	10.
„ „ . . . .	I D . . . .	5.
Santai . . . .	10 . . . .	4.
Saltoro Pass . . . .	See Urdan Glacier	..
Sang-Shuyuan Tzu . . . .	See Ugme Dong .	..
Sanja . . . .	15 L . . . .	7.
„ Sai . . . .	15 L . . . .	7.
Sanju (Bazar) . . . .	VI (1) . . . .	..
„ . . . .	XII Sec. 3 . . . .	Ep., 3.
„ . . . .	XIV Sec. 1 . . . .	Ep., 21, 22.
„ . . . .	XIV (2) . . . .	..
„ . . . .	14 . . . .	5 (Note).
„ . . . .	XIV G . . . .	..
„ . . . .	XIV H . . . .	Ep.
„ . . . .	XIV J . . . .	..
„ Kurghan . . . .	14 . . . .	9.
Sanju (Grim) Pass . . . .	XIV Sec. 1 . . . .	Ep., 17.
„ „ „ . . . .	13 . . . .	Ep.
„ „ „ . . . .	See also Muzarat Pass.	..
„ „ R. . . .	XIV Sec. 1 . . . .	5, 19, 21.
„ „ „ . . . .	XIV D . . . .	1.
„ „ „ . . . .	XIV G . . . .	1.
San-ko-Ch'uan . . . .	XIV Sec. 6 . . . .	11.
San-ko-Ch'uan-Tzu . . . .	XVI A . . . .	2.
	XVI B . . . .	..
Sannich . . . .	I C . . . .	10.
„ Dawan . . . .	I C . . . .	10.
San-pu . . . .	XIV Sec. 6 . . . .	3.
San-T'ai . . . .	XIV Sec. 5 . . . .	2.
San-tao-ling . . . .	XIV Sec. 6 . . . .	4.
Saragat Dawan . . . .	I C . . . .	7.
Sara Kul . . . .	15 Sec. 2 . . . .	4.
Sari Bel Pass . . . .	VI A (1) . . . .	..
Sari Chulsin (Sha-la-lin-lu-su- T'ai).	XI . . . .	14.



Name.	Route.	Stage.
<i>S—contd.</i>		
Sarigh Bel. . . . .	I Sec. 2 . . . . .	9 (Note).
„ Jilga . . . . .	I Sec. 2 . . . . .	8.
„ Tash . . . . .	I L . . . . .	2.
„ „ . . . . .	I M . . . . .	1.
„ Uruk . . . . .	XIV D . . . . .	3.
Sarik-Boye . . . . .	XII D . . . . .	7.
Sarik-bulak . . . . .	I (8) . . . . .	2.
Sari Khulsin . . . . .	10 . . . . .	12.
Sarikol . . . . .	IV, IV (1) . . . . .	..
„ . . . . .	I F . . . . .	Ep.
Sari Kuchar . . . . .	VI . . . . .	7.
Sarikul . . . . .	5 . . . . .	6.
„ (Sari-i-Kul) . . . . .	I C . . . . .	20.
„ . . . . .	I D . . . . .	7.
Sari Tur . . . . .	6 . . . . .	8.
Sari Tur Valley . . . . .	6 . . . . .	8.
Sarok Kamish . . . . .	I A . . . . .	7.
„ „ . . . . .	I B . . . . .	3.
Sarpolaggo . . . . .	2 . . . . .	9.
„ R. . . . .	2 . . . . .	9.
Sarqnamush . . . . .	V Sec. 1 . . . . .	3.
Sasa . . . . .	XIV O . . . . .	..
Sasar . . . . .	See Sasser . . . . .	..
Sasbulak . . . . .	2 . . . . .	3.
Saskan Mazar . . . . .	XIV D . . . . .	6.
Sasser (Sasar) . . . . .	11 . . . . .	Ep.
„ Glacier . . . . .	XIV Sec. 1 . . . . .	7.
„ R. . . . .	XIV Sec. 1 . . . . .	7, 8.
„ Pass . . . . .	XIV Sec. 1 . . . . .	Ep.
„ (Serai) . . . . .	XIV Sec. 1 . . . . .	7.
Sayat . . . . .	I (7) . . . . .	4.
Sazan . . . . .	14 . . . . .	2.
Segatli . . . . .	I C . . . . .	18.
Sehi-Ko . . . . .	See Ch'ing-Sui-Ch'eng. . . . .	..
Semirechensk . . . . .	See Djarkent. . . . .	..



Name.	Route.	Stage.
<i>S—contd.</i>		
Semirechia . . . . .	I Sec. 2 . . . . .	4, 10.
" . . . . .	10 . . . . .	1.
Semipalatinsk . . . . .	XI . . . . .	16.
Seng Jilga . . . . .	V Sec. 2 . . . . .	3.
Se-pi-t'ang . . . . .	XV Sec. 1 . . . . .	6.
Serai Jilga . . . . .	I G (1) . . . . .	3.
Sergiopal . . . . .	XI . . . . .	16.
Setai . . . . .	10 . . . . .	5.
Se-t'e-erh-mu-to-T'ai . . . . .	XI . . . . .	15.
Shahid-Ali-Mazar . . . . .	XII D . . . . .	23.
Shahidulla . . . . .	XII Sec. 3 . . . . .	Ep.
" . . . . .	XIV Sec. 1 . . . . .	15.
" . . . . .	2 . . . . .	Ep., 1.
" . . . . .	13 (1) . . . . .	..
" . . . . .	14 . . . . .	10.
" . . . . .	15 Sec. 1 . . . . .	..
" . . . . .	I C . . . . .	1.
Shah-Shinza . . . . .	XIV Sec. 3 . . . . .	25.
Shahyar . . . . .	XII D . . . . .	23, 24.
" . . . . .	XIV O (i) . . . . .	..
Shaidan . . . . .	See Chaghargah.	
Shaiq-Kak . . . . .	I (8) . . . . .	2.
Shaitan Kum . . . . .	I E . . . . .	2.
Shakan . . . . .	XII D . . . . .	2.
Shakaratma . . . . .	VII (1) . . . . .	..
Shaksgam . . . . .	2 . . . . .	8.
" . . . . .	3 (1) . . . . .	....
" . . . . .	14 . . . . .	7.
Sha-la-wu-su-T'ai . . . . .	XI . . . . .	9.
Sha-maibak . . . . .	XIV Sec. 3 . . . . .	10.
Shamal . . . . .	XIV Sec. 2 . . . . .	6.
Shamal Kan . . . . .	I J . . . . .	4.
Shamal Kum . . . . .	XIII . . . . .	5.
Shang-Kho . . . . .	XIV Sec. 3 . . . . .	20.
Shan Kudak . . . . .	XIV Sec. 2 . . . . .	14.
Shanyaz Ustang . . . . .	I G . . . . .	Ep.



Name.	Route.	Stage.
<i>S—contd.</i>		
Shaptali . . . . .	XIII . . . . .	3.
Sharan Kurghan . . . . .	I C . . . . .	25.
Sharasume . . . . .	XI . . . . .	16.
Shargut . . . . .	5 . . . . .	3.
Shashmarg . . . . .	2 . . . . .	15.
Shathu (Shota) . . . . .	I Sec. 3 . . . . .	Ep., 10.
" . . . . .	6 . . . . .	"
Shay . . . . .	11 . . . . .	Ep., 1.
Sheikle . . . . .	I N . . . . .	2.
Sheikh Tulumush shrine . . . . .	I (10) . . . . .	3.
Sher-Kol . . . . .	XII D . . . . .	25.
Shiao-Tsao-Hu . . . . .	See Pacha Saighan . . . . .	"
Shih-ch'i-hu . . . . .	XIV Sec. 4 . . . . .	6.
Shildar Dawan . . . . .	XIV Sec. 3 . . . . .	9.
Shumshal (Shingshal) . . . . .	2 . . . . .	15.
" Aksai . . . . .	I A . . . . .	10.
" " . . . . .	2 . . . . .	12.
" Pass . . . . .	2 . . . . .	13.
" Pir . . . . .	2 . . . . .	15.
" R. . . . .	2 . . . . .	15.
Shindi . . . . .	XIV R . . . . .	10, 11.
" Valley . . . . .	I (5) . . . . .	1.
" " . . . . .	Sec. 1 . . . . .	8.
Shingshal . . . . .	See Shimshal . . . . .	"
Shinne-dawan . . . . .	I Sec. 2 . . . . .	9.
Shira Kachit . . . . .	2 . . . . .	14.
Shirin-Maidan . . . . .	I (1) . . . . .	1.
Shirshak . . . . .	11 . . . . .	5.
Shitala . . . . .	XIV (3) (i) A . . . . .	"
Shitala Darya . . . . .	XII Sec. 4 . . . . .	12.
Shiulva . . . . .	I Sec. 2 . . . . .	4.
Shival . . . . .	XII Sec. 4 . . . . .	5.
Shiwakte . . . . .	I F . . . . .	3.
Shoaik . . . . .	See Shyok . . . . .	"
Shor Bulak . . . . .	XV Sec. 2 . . . . .	2.
" " . . . . .	I A . . . . .	9.



Name.	Route.	Stage.
<i>S--contd.</i>		
Shor Bulak . . . .	XIV T . . . .	1.
Shorluk . . . . .	XIV P . . . .	5.
Shor Pak . . . . .	XIV Sec. 3 . . . .	14.
Shota . . . . .	See Shattu . . . .	..
Shote . . . . .	XII A . . . .	14.
Shudang Oghil . . . .	XII Sec. 4 . . . .	16.
Shuga (Churga) . . . .	XIII . . . .	9, 10.
Shuijerab . . . . .	2 . . . .	13.
Shulu (Shulia) . . . .	15 H . . . .	2.
Shung Luchi R. . . . .	I D . . . .	1.
Shu-Yu-T'on . . . . .	XII Sec. 4 . . . .	48.
Shyok . . . . .	11 . . . .	4.
„ R. . . . .	XIV Sec. 1 . . . .	Ep., 3, 4, 7.
„ R. (Upper) . . . . .	11 . . . .	Ep., 7, 9, 10.
Silok Langar . . . . .	XII Sec. 3 . . . .	3.
Silliab R. . . . .	VI . . . .	17.
Singen . . . . .	XIV Q . . . .	Ep.
„ . . . . .	XIV R . . . .	14.
Siwatash . . . . .	XIV Sec. 1 . . . .	20.
Sliwkina . . . . .	IX . . . .	7.
Sokh Bulak (and Pass) . . . .	1 . . . .	..
„ „ „ „ . . . .	2 . . . .	2
„ „ . . . . .	I A (1) . . . .	..
„ „ (R.) . . . . .	2 . . . .	2.
Sok Terek . . . . .	15 L . . . .	2.
Somgut . . . . .	15 A . . . .	1.
Somtash . . . . .	I Sec. 2 . . . .	8.
Sotke-Mazar . . . . .	I (8) . . . .	4.
Souk R. . . . .	VII . . . .	7, 11.
Ssu-shih-li-ching-tzu . . . .	XIV Sec. 5 . . . .	3.
Ssu-shih-li-yao-tien . . . .	XIV Sec. 6 . . . .	14.
„ . . . . .	XV Sec. 1 . . . .	1.
Ssu-shih-li-yao-chan . . . .	XIV Sec. 5 . . . .	2.
Ssu-shi-li-ch'eng . . . . .	XIV Sec. 3 . . . .	22.
Ssu-T'ai . . . . .	See Ala-Aigyr . . . .	..
Subachi (Erh-tan) . . . .	XIV Sec. 3 . . . .	28.



Name.	Route.	Stage.
<i>S—contd.</i>		
Subashi . . . .	4 Sec. 1 . . .	3.
" . . . .	4 (I) . . .	5.
" Karaul . . . .	4 Sec. 1 . . .	3.
Su-chi-t'ang . . . .	XV Sec. 1 . . .	10.
Suchow . . . .	XII Sec. 4 . . .	..
" . . . .	XIV . . .	..
" . . . .	XIV Sec. 6 . . .	Ep.
Sufi Kurghan . . . .	VI . . .	Ep., 6.
Suget . . . .	I Sec. 1 . . .	13, 14.
" (and fort). . . .	11 . . .	Ep., 4.
" . . . .	14 . . .	10 and Note.
Suget Ayaghi . . . .	I G (1) . . .	3.
Suget-Bulak . . . .	XIV R . . .	7.
Suget Jangal . . . .	2 . . .	9.
" " . . . .	3 . . .	..
Suget Karaul . . . .	XIV Sec. 1 . . .	15.
" Pass . . . .	XIV Sec. 1 . . .	Ep.
Suget Sai . . . .	XII (1) . . .	5.
Suget Valley . . . .	I G (1) . . .	3.
Sughun Karaul . . . .	I Sec. 2 . . .	3.
Sui-ch-ng-cheng . . . .	XI . . .	16.
Suidun (Ili-fu) . . . .	X . . .	3.
" . . . .	XI . . .	..
" . . . .	10 . . .	1.
Sui-Ning-Ch'eng . . . .	See Manass. . . .	..
Sukma-Oghil . . . .	XII D . . .	7.
Sulaghiz Langar . . . .	XIV E . . .	1.
Sulaghiz Valley . . . .	XIV Sec. 1 . . .	22.
Sulak Kul Dawan . . . .	I H . . .	Ep.
Sulak Kull . . . .	I Sec. 2 . . .	7 (Note).
Su-lo-Ho . . . .	XII Sec. 4 . . .	45.
Sultan Kalich Mazar . . . .	I C . . .	8, 9.
Sultan-Ming-Bash-Alea-Mazar.	I N . . .	1.
Sultanming-Yetkan-Kizen-ing Mazar.	15 H . . .	5.



Name.	Route.	Stage.
<i>S—concl'd.</i>		
Sumbog . . . .	XIV Sec. 1 . . .	1.
Su-mu-t'ou (and R.) . . .	XII (8) . . .	15.
Sungek Pass . . . .	VI (1) . . .	..
Surghak . . . .	XII (1) . . .	1.
" . . . .	15 Sec. 2 . . .	12.
" . . . .	15 L . . .	8.
Surkho . . . .	See Pokkalik . . .	..
Surukwat . . . .	2 . . .	6, 7.
Suwasu Pass . . . .	I (13) . . .	..
<i>T.</i>		
Tabah Khana . . . .	XII D . . .	2.
Tachu'an . . . .	XIV Sec. 5 . . .	1.
Taga . . . .	11 . . .	3.
Tagaboini Pass . . . .	I Sec. 1 . . .	9.
Tagarchi . . . .	XIV (3) . . .	..
Tagdumbash . . . .	See Ili Su . . .	..
Tagdumbash Pamir . . . .	See Pamirs . . .	..
Taghak . . . .	I (10) . . .	3.
" . . . .	I N . . .	2.
Tagharchi . . . .	XIV Sec. 3 . . .	24.
Tagharma . . . .	4 Sec. 1 . . .	1.
" . . . .	4 (1) . . .	..
" Pk. . . .	V Sec. 2 . . .	3.
Taghdumbash . . . .	See Tagdumbash . . .	..
Tagtar Kar . . . .	I L . . .	1.
Ta-ho . . . .	See Data . . .	..
T'a Hsi-Ho . . . .	XI . . .	3.
Ta-hsi-to . . . .	XIV R . . .	5.
Taitma-Kol . . . .	XII (6) . . .	..
Ta-k'an-tzu . . . .	See Jurgat-Sigan . . .	..
Takhat Kuram Pass . . . .	2 . . .	6 (Note).
Takhtah Dawan . . . .	I C . . .	17.
Takhtuwen . . . .	XII Sec. 3 . . .	7.
Takla Makan . . . .	XII Sec. 4 . . .	Ep.



Name.	Route.	Stage.
<i>T—contd.</i>		
Takla Makan . . . . .	XIV Sec. 1 . . . . .	Ep.
Takmak . . . . .	8 . . . . .	1, 3.
Takma . . . . .	13 (1) . . . . .	..
Tala Bulak . . . . .	XV Sec. 2 . . . . .	3.
Talamat . . . . .	8 . . . . .	Ep., 5, 6.
Taldik Pass . . . . .	VI . . . . .	Ep., 10 (Note).
Talkaulik . . . . .	XII (1) . . . . .	2.
Talki Pass . . . . .	10 . . . . .	3, 4.
Tallik Tokai . . . . .	XII Sec. 4 . . . . .	21.
Talmat . . . . .	See Talamat . . . . .	..
Ta-lo-pa . . . . .	See Chul-abad . . . . .	..
Talqchi . . . . .	I D . . . . .	2.
Talti Jilga . . . . .	I A . . . . .	5.
" " . . . . .	I B . . . . .	1.
Tamba Tash . . . . .	See Tamgatash . . . . .	..
Tam Bulak . . . . .	XVI B . . . . .	..
Tamgatash (Tambatash) . . . . .	I Sec. 3 . . . . .	Ep., 7, 8.
Tamoi . . . . .	XIV P . . . . .	5.
Tam Karaul (Langartam) . . . . .	XIV Sec. 1 . . . . .	19.
Tang Ho . . . . .	XII Sec. 4 . . . . .	50.
" " . . . . .	XII (8) . . . . .	17.
Tang R. . . . .	2 . . . . .	13, 15.
Tangitar . . . . .	I E . . . . .	3.
" " Gorge . . . . .	I Sec. 1 . . . . .	8, 9.
" " . . . . .	I (5) . . . . .	2.
Tang Toghrak . . . . .	XIV Sec. 2 . . . . .	10.
Tangtze . . . . .	15 Sec. 2 . . . . .	9.
Ta-pa-cheng . . . . .	XIV Sec. 4 . . . . .	..
Ta-pan-Ch'ai-tzu . . . . .	XIV Sec. 3 . . . . .	9.
Ta-pan-Ch'eng . . . . .	XIV Sec. 2 . . . . .	Ep.
" " " . . . . .	XIV Sec. 4 . . . . .	Ep., 3.
Ta-pan Ho (Algoi Bridge) . . . . .	XVI . . . . .	1.
Ta-pan-shan . . . . .	XVI Sec. 2 . . . . .	Ep.
Tapan Shah . . . . .	XVI Sec. 4 . . . . .	Ep., 2, 3.
Tar . . . . .	2 . . . . .	Ep., 1, 2.



Name.	Route.	Stage.
<i>T—contd.</i>		
Tar-Aghzi . . . .	XII (3) . . . .	10.
Tar Aghzi . . . .	I B . . . .	13.
Tarak Oghil . . . .	XIV D . . . .	1.
Tarang Su . . . .	I (10) . . . .	Ep., 4.
" " . . . .	I (11) . . . .	2.
Tarbagatai (Chuguchak) . . . .	XI . . . .	Ep., 7, 16.
" " . . . .	10 . . . .	Ep., 11, 14.
" Mts. . . .	10 . . . .	14.
Tarbashi Defile and R. . . .	I Sec. 1 . . . .	Ep., 8, 9.
" " . . . .	I F . . . .	"
" Gumbad . . . .	V Sec. 1 . . . .	1.
Tarbogaz . . . .	XIV Sec. 1 . . . .	17.
Tarbugaz-Langar . . . .	XII Sec. 3 . . . .	8, 9.
Tarim . . . .	I J . . . .	"
" Kishlak . . . .	15 G . . . .	2.
Tarim R. . . .	XII Sec. 4 . . . .	32.
" R. . . .	XII (6) . . . .	Ep.
" R. . . .	XII A . . . .	15.
" R. . . .	XIV O . . . .	Ep.
" R. . . .	XIV P. . . .	Ep., 7.
Targhalik . . . .	I L . . . .	2.
Tarlak . . . .	I N . . . .	4.
Tarsaj . . . .	I C . . . .	18.
Tartak Sai . . . .	I N . . . .	5.
Tash Bulak . . . .	XII (1) . . . .	9.
" " . . . .	See also Ak-Tagh-Bulak.	"
" Dawan . . . .	XII (8) . . . .	7.
Ta-Shih-t'ou . . . .	XIV Sec. 6 . . . .	10.
Tashkan . . . .	15 B . . . .	2.
Tashkerim . . . .	I E . . . .	5.
Tashkoi . . . .	XII (8) . . . .	7.
Tashkurghan. . . .	I Sec. 1 . . . .	Ep., 5, 6.
" R. . . .	I Sec. 1 . . . .	4 7 8.
" . . . .	IV, IV (1) . . . .	"
" . . . .	V (3) . . . .	5



Name.	Route.	Stage.
T—contd.		
Tashkurghan . . . .	4 . . . .	1. ..
" . . . .	4 Sec. 2 . . . .	1.
" . . . .	I A . . . .	26. ..
" . . . .	I C . . . .	Ep., 4.
" . . . .	I E . . . .	25.
" R. . . .	I C . . . .	Ep.
Tash Malik . . . .	V . . . .	2 (Note), 4.
" " . . . .	V Sec. 1 . . . .	Ep.
" " . . . .	V (1) . . . .	2.
" " . . . .	V (2) . . . .	..
" " . . . .	V (3) . . . .	2.
" " . . . .	V (4) . . . .	..
" " . . . .	V A . . . .	..
" " . . . .	4 B . . . .	6.
" " R. . . .	I F . . . .	7.
Tashneh . . . .	I D . . . .	6.
Tashte Aghil . . . .	15 A . . . .	5.
Tash-Ungur . . . .	I C . . . .	18.
Tashui . . . .	VI . . . .	8.
Tatir . . . .	I (7) . . . .	3.
" . . . .	I D . . . .	1.
Tatlik Bulak . . . .	XII Sec. 4 . . . .	28.
Tatran . . . .	XII Sec. 4 . . . .	30.
Tauqueh Taq Mazar . . . .	I D . . . .	6.
Taushkan Valley . . . .	I Sec. 2 . . . .	Ep., 7 (Note).
" R. . . .	See Kokshal R. . . .	..
Tejan . . . .	See Tug . . . .	..
Tekasikrik . . . .	I F . . . .	1.
Tekellik Dong . . . .	15 L . . . .	2.
Tekes R. . . .	I Sec. 3 . . . .	11.
" " . . . .	6 . . . .	2, 5.
" " . . . .	7 . . . .	Ep., 1
" " Bridge (Jirgelan) . . . .	7 . . . .	Ep., 1.
" Plain . . . .	6 . . . .	1, 5.
Tegar . . . .	XIV Sec. 1 . . . .	4.



Name.	Route.	Stage.
<i>T—contd.</i>		
Tegerak Hills . . . .	I Sec. 2 . . . .	..
Temerlik . . . .	Index, page ii . .	(Note).
Terang Dawan . . . .	I N . . . .	5.
Terek . . . .	XII D . . . .	23.
Terek-Abad . . . .	I (8) . . . .	1.
Terek Kichik Jilga . . . .	I F . . . .	4.
Terek Langar . . . .	XIV Sec. 2 . . . .	1.
Terek Pass . . . .	VI . . . .	Ep., 10 (Note).
" " . . . .	VIII . . . .	Ep., 5.
Terek Pass . . . .	I L . . . .	3.
" R. . . .	VIII . . . .	4.
" " . . . .	See also Terek Su . .	..
" Su . . . .	I Sec. 2 . . . .	2.
" " . . . .	VI . . . .	12.
" " . . . .	I L . . . .	1.
Terek Tan . . . .	VI A (1) . . . .	..
Terim . . . .	V Sec. 1 . . . .	5.
T-feh-Shui . . . .	See Churga . . . .	..
Thais . . . .	I B . . . .	Ep., 13.
" . . . .	I C . . . .	14.
Thalam Buti . . . .	XIV Sec. 1 . . . .	5.
Thangne Asie . . . .	I C . . . .	15.
Thian Shan . . . .	I Sec. 2 . . . .	4.
" " . . . .	I (11) . . . .	1, 2, 3.
" " . . . .	XIV Sec. 3 . . . .	4, 9, 12.
" " . . . .	XIV Sec. 5 . . . .	2 (Note), 3, 6.
" " . . . .	XIV Sec. 6 . . . .	Ep., 3, 9.
" " Nan-lu . . . .	XVI . . . .	..
" " Pei-lu . . . .	XIV Sec. 6 . . . .	10.
Thin Kiuk R. . . .	2 . . . .	15.
Thul . . . .	XI . . . .	13.
" . . . .	10 . . . .	11.
Tian Shan . . . .	See Thian Shan . .	..
Tien Shan . . . .	See Thian Shan . .	..
Tigar Mansu . . . .	I (1) . . . .	3.



Name.	Route.	Stage.
<i>T—contd.</i>		
Tikelik Tagh . . . . .	15 H . . . . .	4.
Tikenlik . . . . .	XIV P . . . . .	5.
" . . . . .	XIV Q . . . . .	Ep.
Tikmik . . . . .	XIV (6) . . . . .	..
Tikse . . . . .	11 . . . . .	Ep., 1.
Tim (Ta-tun-tzu) . . . . .	XIV Sec. 3 . . . . .	19.
" . . . . .	XIV (7) . . . . .	..
Tirib R. . . . .	XIV Sec. 1 . . . . .	4.
Tizan Tazghun . . . . .	XIV F . . . . .	2.
Tiznaf-Kurghan. . . . .	I Sec. 1 . . . . .	7.
Tiznaf R. . . . .	XIV Sec. 1 . . . . .	26.
" " . . . . .	XIV (3), XIV (3) (i). . . . .	..
" " . . . . .	2 . . . . .	6 (Note).
" " Upper . . . . .	13 . . . . .	Ep., 5, 9.
" " . . . . .	14 . . . . .	Ep.
" Valley . . . . .	I C . . . . .	13, 16
Tiznif . . . . .	4 Sec. 1 . . . . .	1.
Tiztagh . . . . .	15 F . . . . .	1.
Toghai Langar . . . . .	XII (1) . . . . .	1.
Togarak . . . . .	I (6) . . . . .	2.
Togetaidi . . . . .	XII D . . . . .	7.
Togha (Togra) Su . . . . .	14. . . . .	9.
Toghrak Bulak . . . . .	I Sec. 2 . . . . .	4.
" " . . . . .	I (7) . . . . .	7.
Toghrak Bulak . . . . .	XII Sec. 4 . . . . .	45.
Toghrak Bulak . . . . .	XIV Q. . . . .	Ep.
Togra Dheng . . . . .	XIV Sec. 3 . . . . .	3.
Toghrak Dhung . . . . .	XIV Sec. 3 . . . . .	9.
Toghrak-Kupruk-Langar . . . . .	XIV D . . . . .	4.
Toghrak Ulang . . . . .	See Achang. . . . .	..
Togra Su . . . . .	I Sec. 3 . . . . .	8.
To'-Ho-Mu-T'u-T'ai . . . . .	I Sec. 4 . . . . .	7.
Toile-bulung . . . . .	I F . . . . .	2.
Tokanak . . . . .	2 . . . . .	4.
Tok-desum-dawan . . . . .	I N . . . . .	4.



Name.	Route.	Stage.
<i>T—contd.</i>		
Tokez Dawan . . . .	V Sec. 1 . . . .	2 (Note).
" " . . . .	I F . . . .	5 (Note).
Tokhala . . . .	15 D . . . .	1.
Tokhta-oila-ozar . . . .	I N . . . .	3.
Tokh Tereh Pass . . . .	5 . . . .	Ep., 6, 7.
Tokmak . . . .	2 . . . .	15.
Tokanak . . . .	13 . . . .	9 (Note).
Tokruk . . . .	XIV T . . . .	1.
Toksun . . . .	XIV Sec. 2 . . . .	Ep.
" . . . .	XIV Sec. 3 . . . .	29.
" . . . .	XVI . . . .	Ep.
" . . . .	XVI A . . . .	3.
Tokum . . . .	XIV P . . . .	7.
" . . . .	XIV P (1) . . . .	"
Tokus Ak . . . .	V Sec. 1 . . . .	5.
" " . . . .	See Tokuzak . . . .	"
Tokus Dawan (9 passes) . . . .	V . . . .	Ep.
" " . . . .	V (1) . . . .	2.
" " . . . .	V (4) . . . .	2.
Tokuzak . . . .	4 B . . . .	6.
" . . . .	See Tokus Ak . . . .	"
Tokuzat . . . .	4 B . . . .	6.
Tokuzmat . . . .	I D . . . .	2.
Tolan Ghuja . . . .	XII (1) . . . .	5.
To-Li-T'ai . . . .	I Sec. 4 . . . .	8.
Toman Jilga . . . .	15 B . . . .	1.
Tong-Bash-Oghul . . . .	15 B . . . .	1.
Tonguz- borun . . . .	I (8) . . . .	1.
Tonguzluk . . . .	XII A . . . .	8.
Topa Dawan . . . .	I Sec. 3 . . . .	3.
" " . . . .	I (10) . . . .	Ep.
Topa Dawan . . . .	XIV Sec. 3 . . . .	4.
Topa Pass . . . .	I B . . . .	4.
Topa Kotal . . . .	I A . . . .	7 (Note), 8.
Topluk . . . .	XII Sec. 1 . . . .	3.
Torat Pass . . . .	I Sec. 1 . . . .	9.



Name.	Route.	Stage.
<i>T—contd.</i>		
Torkul . . . . .	XV Sec. 2 . . . . .	4.
Toruk .. . . .	XIV Sec. 6 . . . . .	Ep.
" . . . . .	XV . . . . .	..
" . . . . .	XIV G . . . . .	..
T'o-To-k'o-Tai . . . . .	I Sec. 4 . . . . .	10.
Toun Tube . . . . .	VII . . . . .	6, 7.
T'ou-pu . . . . .	XIV Sec. 6 . . . . .	1.
T'ou-Shui . . . . .	XIV Sec. 6 . . . . .	9.
Toutai . . . . .	10 . . . . .	13.
Towilgha (Ch'ing Huai-ho-tzu).	XIV Sec. 3 . . . . .	22.
Toyakuiruk . . . . .	5 . . . . .	4.
Toyin Toba . . . . .	VII (1) . . . . .	..
Tozgun . . . . .	XII Sec. 1 . . . . .	1.
Ts'ai-o-pu . . . . .	XIV Sec. 4 . . . . .	4.
Tsultak . . . . .	11 . . . . .	3.
Tug (Tejan ?) . . . . .	I L . . . . .	..
" . . . . .	See Tugh . . . . .	..
Tugap-Khan-Akin . . . . .	XIV R . . . . .	14.
Tuge-Chushok . . . . .	XII D . . . . .	7.
Tugen Tai gorge . . . . .	I F . . . . .	5 (& Note B).
Tugh . . . . .	I Sec. 2 . . . . .	2.
" . . . . .	See Tug . . . . .	..
Tughemmen-bagh . . . . .	XII D . . . . .	25.
Tugh-bel-che Valley . . . . .	I Sec. 3 . . . . .	7.
Tughra . . . . .	XIV Sec. 1 . . . . .	16.
Tugrak Bulak . . . . .	See Toghrak Bulak . . . . .	..
Tughrasu . . . . .	XIV Sec. 1 . . . . .	16.
Tugh-sai . . . . .	XII (1) . . . . .	7.
Tuman . . . . .	V Sec. 1 . . . . .	5.
Tuman Aghzi . . . . .	15 A . . . . .	8.
" " . . . . .	15 B . . . . .	..
" " . . . . .	15 E . . . . .	10.
Tumanchi R. . . . .	4 Sec. 2 . . . . .	1.



Name.	Route.	Stage.
<i>T—contd.</i>		
Tumshuk . . . .	XIV Sec. 2 . . . .	9 (Note)
Tumuyar . . . .	15 L . . . .	5.
Tunguzluk . . . .	I (7) . . . .	1.
Tun-Huang (Sa-chow) . . . .	XII Sec. 4 . . . .	Ep., 48, 49,
„ „ -hsien . . . .	XII (8) . . . .	17.
„ „ . . . .	Index, page ii . . . .	Note.
Tung . . . .	I D . . . .	4.
„ R. . . .	I C . . . .	20, 21, 22.
„ Qal'ah . . . .	I C . . . .	20.
T'ung Ch'ang kou . . . .	See Kang . . . .	..
Tun-Mu-Ta-T'ai . . . .	I Sec. 4 . . . .	12.
Tunshug Karchik . . . .	V Sec. 1 . . . .	4.
Tunus Chap . . . .	XII (3) . . . .	7.
Tupa (Topa ?)Dawan . . . .	I C . . . .	9.
Tupa Dawan . . . .	I C . . . .	18.
Tuqui . . . .	V Sec. 1 . . . .	3.
Tuguoibashi . . . .	I Sec. 1 . . . .	11.
Tuguzak (Mangan) Bazar . . . .	V Sec. 1 . . . .	5 (and Note)
Tupa Dawan . . . .	13 . . . .	4, 5.
Tupa Dawan . . . .	13 (1) . . . .	23.
Tupa Pass . . . .	13 . . . .	..
Turak Yailik . . . .	I Sec. 3 . . . .	6.
Tur Bulung R. . . .	4 Sec. 1 . . . .	4.
Turgat . . . .	VII . . . .	5.
„ Pass . . . .	VII . . . .	Ep., 6.
„ R. . . .	VII . . . .	6, 7.
Turfan . . . .	XIV Sec. 2 . . . .	Ep.
„ . . . .	XIV Sec. 3 . . . .	Ep.
„ . . . .	XIV Sec. 4 . . . .	2.
„ . . . .	XIV Sec. 6 . . . .	6.
„ . . . .	XVI . . . .	1.
„ . . . .	XIV S . . . .	..
„ . . . .	XVI A . . . .	..
Turgan-goi . . . .	XV Sec. 2 . . . .	4.
Turgat-Sigan (Ta-k'an-Tzu) . . . .	XIV Sec. 4 . . . .	1.
Turnalak . . . .	XII Sec. 1 . . . .	1.



Name.	Route.	Stage.
<i>T—concl'd.</i>		
Turugh Art Dawan . . .	VII (1) . . .	..
Tusgen Oghil . . .	XIV E . . .	..
Tushek Kol . . .	XII A . . .	15.
Tushkan Darya . . .	I N . . .	1.
Tuskan Darya . . .	I (7) . . .	7.
Tutiyalik . . .	XIV Sec. 1 . . .	6.
Tuz Alqu . . .	I D . . .	7.
Tuz Ashu R. . .	VIII . . .	1, 2.
Tuzgen Oghil . . .	XIV D . . .	1.
Tuzyar Dawan . . .	I C . . .	8.
Tzu-ni-Ch'uan . . .	See Chorchuk . . .	..
Tzu-ni-Chu'an . . .	XIV Sec. 5 . . .	4.
Tzu-ni-Ch'uan . . .	XIV Sec. 6 . . .	12.
<i>U</i>		
Uch Baldir (Tuz Alqu) . . .	I D . . .	7.
Uchi R. . .	See Wacha . . .	..
Uch Kapa . . .	V Sec. 1 . . .	1.
Uch (Uth) Turfan . . .	I Sec. 2 . . .	Ep., 10.
" " . . .	I (7) . . .	5.
" " . . .	I (8) . . .	4.
" " . . .	I (10) . . .	..
" " . . .	IX . . .	Ep.
" " . . .	I N . . .	..
Udungei . . .	I Sec. 3 . . .	9.
Ugen Darya . . .	XII D . . .	22, 23.
Ui Bulak . . .	I (6) . . .	1.
Ui-Tal R. . .	IX . . .	4.
Ui Tujhrak . . .	XII Sec. 4 . . .	7.
Ujad Bai . . .	I Sec. 1 . . .	4.
" " . . .	I A . . .	3.
" " . . .	I A(1) . . .	1.
Ujat . . .	15 A . . .	10.
Ujme Dong (Sang-Shuyuan Tzu).	XIV Sec. 3 . . .	27.



Name.	Route.	Stage.
<i>U—contd.</i>		
Uksalir . . . .	VI . . . .	13, 14.
" . . . .	VI B . . . .	..
Ul-an-ussu . . . .	XI . . . .	5.
Ularlik Jilga . . . .	V (1) . . . .	2.
" " . . . .	V (4) . . . .	2.
" Pass . . . .	V (1) . . . .	2.
" " . . . .	V (4) . . . .	2.
Ulguluk . . . .	11 . . . .	8.
Ulugchat . . . .	VI . . . .	Ep., 12, 13.
Ulug Kul . . . .	15 Sec. 2 . . . .	4.
Ulugh-art Dawan . . . .	15 A . . . .	9.
Ulugh Art Pass . . . .	4 Sec. 2 . . . .	2.
Ulugh-art-Jilga . . . .	15 E . . . .	9.
Ulugh Dawan . . . .	15 G . . . .	2.
Ulugh Istang . . . .	I C . . . .	22.
Ulugh-Kol . . . .	XIV P . . . .	4.
Ulugh Mazar . . . .	XII D . . . .	3.
Ulugh Mustagh Pass . . . .	Index, page ii . . . .	Note.
Ulugh Rabat Pass . . . .	4 Sec. 1 . . . .	3.
Ulugh Sai . . . .	XII (1) . . . .	1.
Ulush . . . .	See Oschleh . . . .	..
Umlung . . . .	XIV Sec. I . . . .	5.
Ungen Darya . . . .	XIV O . . . .	..
Urdiklik . . . .	XIII . . . .	7, 8.
" . . . .	XIV L . . . .	Ep., 3.
Urdok Glacier (Saltoro Pass)	3 (1) . . . .	8.
Urdok Saldi . . . .	2. . . .	5.
Urge . . . .	XV Sec. 2 . . . .	5.
Urpi . . . .	XII Sec. 1 . . . .	4.
Urpulik . . . .	14 . . . .	4.
Urta Kurghan . . . .	IX . . . .	3.
Uruk . . . .	VI . . . .	16.
" R. . . .	VI A . . . .	..
" " . . . .	I A . . . .	7.
Uruksai . . . .	I A . . . .	7.



Name.	Route.	Stage.
<i>U—concl'd.</i>		
Urumchi . . . .	I Sec. 3 . . . .	2.
" . . . .	I Sec. 4 . . . .	22.
" . . . .	I (11) . . . .	1.
" . . . .	XI . . . .	Ep.
" . . . .	XIII . . . .	Ep.
" . . . .	XIV Sec. 2 . . . .	Ep.
" . . . .	XIV Sec. 3 . . . .	Ep.
" . . . .	XIV Sec. 4 . . . .	6, 22.
" . . . .	XIV Sec. 5 . . . .	Ep., 6, 7.
" . . . .	XIV Sec. 6 . . . .	9.
" . . . .	10 . . . .	6, 11.
Urung Kash . . . .	XII A . . . .	Ep., 1.
Usgend . . . .	VI (1) . . . .	..
Ushaktul (Wu-Shih-Ta-la) .	XIV Sec. 3 . . . .	24.
Ush Dawa . . . .	2 . . . .	6.
Utch Turfan . . . .	See Uch Turfan . . . .	..
Uzun Sai . . . .	15 B . . . .	2.
Uzun Su . . . .	VIII . . . .	8.
Uzun Tal defile . . . .	4 Sec. 1 . . . .	Ep., 4.
" " Gumbad . . . .	4 Sec. 1 . . . .	4.
<i>V</i>		
Vash-Shari (Bazar) . . . .	XII Sec. 4 . . . .	27.
" " . . . .	XII (3) . . . .	10.
" " R. . . .	XII Sec. 4 . . . .	27.
Voya . . . .	I E . . . .	5.
Vyerni . . . .	X . . . .	Ep.
" . . . .	10 . . . .	1.
<i>W</i>		
Wacha (Uchi) R. . . .	I C . . . .	25.
Wakhan . . . .	II . . . .	..
Wakhir Lilga . . . .	I (2) . . . .	Ep.



Name.	Route.	Stage.
<i>W—concl.</i>		
Wakhpe . . . .	XII A . . . .	16.
Wap Jilga . . . .	XIV Sec. 1 . . . .	12.
Woujuk R. . . . .	See Chipjak . . . .	..
Wu-Erh-ko-Tu-pu-la-k'O-Tai	XI . . . . .	11.
Wu-lan-wusu . . . .	XV Sec. 1 . . . .	5.
Wu-shih-li-yao-chan . . . .	XIV Sec. 5 . . . .	5.
Wu-shih-ta-la . . . .	See Ushaktul . . . .	..
Wu' T'ai . . . . .	I Sec. 4 . . . . .	6.
Wu T'ai . . . . .	XIV (4) . . . . .	2.
Wu-T'u shui . . . . .	XV Sec. 1 . . . . .	8.
X.		
<i>Nil.</i>		
Y.		
Yagache-ile-dawan . . . .	XIV R . . . . .	15.
Yagan Aghzi . . . . .	15 E . . . . .	8.
Yagan Dawan . . . . .	15 E . . . . .	7.
Yaghzi . . . . .	I B . . . . .	7.
Yaida Urteng (Jaidi) . . . .	XIV Sec. 2 . . . .	12.
" " " " . . . . .	XIV (5) . . . . .	..
Yai Dobe (Jadowa ?) . . . .	I Sec. 2 . . . . .	Note before Ep.
" " . . . . .	I Sec. 2 . . . . .	4.
" " . . . . .	I (6) . . . . .	Ep. and Note before Ep.
" " . . . . .	I (7) . . . . .	1.
Yailak . . . . .	I J . . . . .	1.
Yaipaktash . . . . .	2 . . . . .	11.
Yairam Bulak . . . . .	I Sec. 2 . . . . .	5.
" " . . . . .	I M . . . . .	1.
Yakalat . . . . .	XII (1) . . . . .	1.
Yakim-Bulak . . . . .	XIV R . . . . .	4, 10.



Name.	Route.	Stage.
<i>Y—contd.</i>		
Yakir-i-Kurghan . . .	I E . . .	1, 3.
Yakka Aria . . .	I Sec. 3 . . .	5.
" " " " . . .	I (10) . . .	6.
Yakka Arik (Ch'a Ch'i) . . .	XIV Sec. 3 . . .	4, 11.
" " " " . . .	XIV N. . . .	Ep.
Yaka Kudak . . .	XIV Sec. 2 . . .	11.
" " " " . . .	XIV (5) . . .	..
Yakka Tugrak . . .	XII Sec. 4 . . .	25.
Ya Koprik . . .	I Sec. 2 . . .	11.
Yak Shamba . . .	XIV Sec. 1 . . .	26.
" " " " . . .	XIV Sec. 2 . . .	1.
Yaliak . . .	See Kitchik Yallak	..
Yanaliq . . .	I C . . .	19.
Yamantur Ferry . . .	7 . . .	Ep., 2.
Yaman Yar . . .	See Kazan Kul . . .	..
" " " " . . .	V Sec. 1 . . .	5.
" " " " . . .	I J . . .	..
" " " " . . .	I K . . .	1.
Yamatu . . .	10 . . .	11.
Ya-na-t'u-T'ai . . .	XI . . .	12.
Yam Bulak . . .	I Sec. 1 . . .	8.
" " " " . . .	I (5) . . .	2.
Yandama . . .	XIII . . .	1.
Yandashkan . . .	XIV Sec. 4 . . .	30.
Yang ch'ang-Kou . . .	XIV Sec. 4 . . .	6.
Yanghalik . . .	XIV Sec. 1 . . .	19.
" " " " Jilga . . .	XIV (2) . . .	..
Yangi Abad . . .	I (10) . . .	1.
Yangi Abad, or Awat (Erk-pa-tai). . .	XIII . . .	4, 5.
" " " " . . .	XIV Sec. 2 . . .	16.
" " " " . . .	XIV (5) . . .	..
" " " " . . .	XIV Sec. 3 . . .	13.
Yang Arik . . .	I J . . .	2.
" " " " . . .	XII A . . .	1.



Name.	Route.	Stage.
Y—contd.		
Yangi Dawan . . . .	13 . . . .	10.
Yangi Gu . . . .	XIV P . . . .	6.
Yangi Hissar . . . .	I Sec. 1 . . . .	Ep., 13.
" " (and R.) . . . .	XII Sec. 1 . . . .	2.
" " . . . .	5 . . . .	..
" " . . . .	I G (1) . . . .	5.
" " . . . .	I K (1) . . . .	..
Yangi Hissar (Isar) . . . .	XIV Sec. 3 . . . .	15.
Yangi-Langar . . . .	15 G . . . .	3.
Yangi Mahalla . . . .	I Sec. 3 . . . .	6.
Yangi Pass . . . .	I Sec. 1 . . . .	8.
" " . . . .	2 . . . .	4 (and Note).
Yangi Tagarman . . . .	I Sec. 3 . . . .	13.
" " . . . .	I (13) . . . .	..
Yan Tagh . . . .	XIV Sec. 3 . . . .	19.
Yantak Kuduk . . . .	XII Sec. 4 . . . .	48.
Yantak Kuduk (wells) . . . .	XII Sec. 4 . . . .	42.
Yantak-Duk . . . .	XII Sec. 4 . . . .	18.
Yao Chan-tzu . . . .	XIV Sec. 3 . . . .	9.
Yao-tien . . . .	XIV Sec. 6 . . . .	13.
Yapchan . . . .	I Sec. 1 . . . .	14.
" . . . .	XII Sec. 1 . . . .	1.
" . . . .	I K (a) . . . .	..
" Jilga . . . .	I F . . . .	4, 5 (Note B).
Yapchanlik . . . .	XIV F . . . .	2.
Yarigh . . . .	XII (1) . . . .	4, 5.
Yarkand . . . .	XII Sec. 1 . . . .	Ep., 5.
" . . . .	XIII . . . .	7.
" . . . .	XIV Sec. 1 . . . .	Ep., 4, 27.
" . . . .	XIV (3) . . . .	..
" . . . .	2 . . . .	4.
" . . . .	13 . . . .	Ep.
" . . . .	14 . . . .	3.
" . . . .	I B . . . .	Ep., 16.
" . . . .	I C . . . .	5.



Name.	Route.	Stage.
<i>Y—contd.</i>		
Yarkand . . . .	I D . . . .	1, 5.
" . . . .	I E . . . .	Ep., 4.
" . . . .	I F . . . .	8.
" . . . .	I G (1) . . . .	3.
" . . . .	I H . . . .	Ep.
" . . . .	XIV L . . . .	..
" R. (Zaraishan) . . . .	XIII . . . .	10.
" " . . . .	XIV Sec. 1 . . . .	13.
" " . . . .	XIV (3), XIV (3) (i). . . .	..
" " . . . .	XIV (4) . . . .	2.
" " (Tarim) . . . .	XIV Sec. 2 . . . .	9 (Note), 10.
" " . . . .	2 . . . .	Ep., 2, 4, 6.
" " . . . .	3 . . . .	Ep.
" " " . . . .	I A . . . .	Ep., 4, 7, 8.
" " " . . . .	I B . . . .	Ep., 3, 15.
" " " . . . .	I C . . . .	Ep., 20.
" " . . . .	I D . . . .	2, 4, 5.
" " . . . .	I J . . . .	4, 5.
" " . . . .	XII A . . . .	15.
" " . . . .	XIV L . . . .	1.
" " . . . .	XIV P . . . .	3.
" " . . . .	XVI . . . .	1 (Note).
Yarkhoto . . . .	XIV R (1) . . . .	..
" . . . .	I E . . . .	4.
Yarmunarik . . . .	XIV E . . . .	1.
Yar Oghil . . . .	XII Sec. 4 . . . .	13.
Yartungaz R. . . .	15 B . . . .	2.
Yar-Yut . . . .	15 B . . . .	2.
" Dawan . . . .	I D . . . .	5.
Yasling Forest . . . .	XIII . . . .	6.
Yassulak . . . .	XII Sec. 4 . . . .	8.
Yasyulgun . . . .	I Sec. 1 . . . .	8.
Yashill Kol . . . .	XIV D . . . .	5.
Yawash . . . .	XII D . . . .	7.
Yazkorghhan Yailak . . . .	See Ishma . . . .	..
Yeh-Yung Kou . . . .	XIV R . . . .	6.
Yeman Torgai . . . .		



Name.	Route.	Stage.
<i>Y—contd.</i>		
Yemaz Jilga . . .	15 B . . .	1.
Yenbulak Pass . . .	4 B . . .	1.
Yen-ch'i Fu . . .	See Karashar. . .	..
Yen-shui-ch'ai-Tzu . . .	XIV Sec. 3 . . .	10.
Yen-tun . . .	XIV Sec. 6 . . .	Ep.
Yeshiq . . .	I D . . .	3.
Yetim Dobe . . .	I (11) . . .	2.
Yildizbik . . .	I J . . .	3.
Yokakun . . .	XII Sec. 3 . . .	9.
Yil bashi Akim . . .	XIV H . . .	Ep.
Ying P'an . . .	XIV Q . . .	Ep.
Yoghan Dong . . .	XII Sec. 4 . . .	20.
Yoghan Kum . . .	XII D . . .	7.
Yoghan Toghrak Yailak . . .	XII D . . .	2.
Yokaka-Mahalla . . .	XIV J . . .	2.
Yokake Mazar . . .	15 D . . .	1.
Yoke Tugrak . . .	XII Sec. 4 . . .	14.
Yolarik . . .	13 . . .	2.
Yol-arish . . .	15 Sec. 2 . . .	10.
" . . .	15 H . . .	..
Yul Arik . . .	XIV D . . .	6.
Yulchun Langar . . .	15 H . . .	3.
Yulduz . . .	6 . . .	Ep., 9, 10.
Yulduz R. . .	6 . . .	10, 11.
" " (Big) . . .	6 . . .	12 [(Note (c)].
" " (Little) . . .	6 . . .	12 [(Note (d)].
" " . . .	6 . . .	13.
" Valley . . .	7 . . .	Ep.
" " . . .	8 . . .	Ep., 6.
Yulghun Bulak . . .	XII (8) . . .	9.
Yulghun Balak Sar . . .	XII (1) . . .	5.
Yundama Kol . . .	XII D . . .	6.



Name.	Route.	Stage.
<b>Y—concl'd.</b>		
Yapoga . . . .	I J . . . .	1.
Yupolik Pass . . . .	I Sec. 3 . . . .	8.
Yurungkash R. . . .	XII Sec. 4 . . . .	1.
" " . . . .	XII C . . . .	Ep.
Yushon Kou . . . .	See Kara Kizil . . . .	..
Yut Kuluk . . . .	XIV D . . . .	3.
<b>Z</b>		
Zairam Nor . . . .	10 . . . .	3.
Zaisan . . . .	XI . . . .	16.
Zak-tokai . . . .	15 B . . . .	2.
Zambil . . . .	I Sec. 2 . . . .	5.
Zanguya . . . .	XII Sec. 3 . . . .	5.
" . . . .	XIV H . . . .	Ep.
" . . . .	XIV K . . . .	1.
Zanken stream . . . .	I Sec. 1 . . . .	4.
Zagaentai R. . . .	6 . . . .	18.
Zarafshan R. . . .	See Zaraishan R. . . .	..
Zaraishan R. . . .	See Yarkand R. . . .	..
Zargabin . . . .	2 . . . .	15.
Zarkhou Oghil . . . .	I N . . . .	3.
Zawa . . . .	XII Sec. 3 . . . .	Ep., 9.
Zhemiqin . . . .	I C . . . .	19.
Zingrul . . . .	11 . . . .	3.
Zinjik Aral . . . .	15 J . . . .	1.
Zoaka Pass . . . .	IX . . . .	1.
Zoobechie . . . .	15 Sec. 2 . . . .	6.
Zumchi . . . .	I B . . . .	11, 12.





*Scale of Miles*

Miles 20 40 60 80 100 120 140 160



10R: L/MIL/AT/14/76